

# SAFETY DATA SHEET

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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Trade name or designation of the mixture** Chockfast Red Aggregate

**Registration number** -

**Synonyms** None.

**SKU#** GP107A

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** Not available.

**Uses advised against** None known.

### 1.3. Details of the supplier of the safety data sheet

**Company Name** ITW Performance Polymers

**Address** Bay 150  
Shannon Industrial Estate  
Co. Clare  
Ireland  
V14 DF82

**Contact Person** Customer Service

**Telephone Number** 353(61)771500  
353(61)471285

**Email** customerservice.shannon@itwpp.com

**Emergency Phone Number** 44(0) 1235 239 670 (24 hours)

### 1.4. Emergency telephone number

**General in EU** 112 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

**Austria National Poisons Information Center** +431 406 4343 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

**Belgium National Poisons Control Center** 070 245 245 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

**Bulgaria National Toxicological Information Center** +359 2 9154 233 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

**Croatia Poisons Information Center** +385 1 2348 342 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)

**Cyprus Poison Center** 1401 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

**Czech Republic National Poisons Information Center** +420 224 919 293, or +420 224 915 402 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)

**Denmark National Poisons Control Center** +45 82 12 12 12 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

**Estonia National Poisons Information Center** 16662 or abroad: (+372) 626 9390 (Monday 9:00AM to Saturday 9:00AM (closed on Sundays and on national holidays). SDS/Product information may not be available for the Emergency Service.)

**Finland National Poison Information Center** (09) 471 977 (direct) or (09) 4711 (exchange) (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

**France National Poisons Control Center** ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

#### 1.4. Emergency telephone number

<b>Greece Poison Information Centre</b>	(0030) 2107793777 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Hungary National Emergency Phone Number</b>	+36-80-201-199 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Iceland Poison Center</b>	(+354) 543 2222 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Latvia Emergency medical aid</b>	113
<b>Latvia Poison and Drug Information Center</b>	+371 67042473 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Lithuania Neatidėliotina informacija apsinuodijus</b>	+370 5 236 20 52 or +37068753378 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)
<b>Malta Accident and Emergency Department</b>	2545 4030 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)
<b>Netherlands National Poisons Information Center (NVIC)</b>	NVIC: +31 (0)88 755 8000 (Only for the purpose of informing medical personnel in cases of acute intoxications)
<b>Norway Norwegian Poison Information Center</b>	22 59 13 00 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Portugal Poison Center</b>	800 250 250 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Romania Biroul RSI si Informare Toxicologica</b>	021.318.36.06 (Available 8:00AM-3:00PM. SDS/Product information may not be available for the Emergency Service.)
<b>Slovakia National Toxicological Information Center</b>	+421 2 5477 4166 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Spain Toxicology Information Service</b>	+ 34 91 562 04 20 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Sweden National Poison Information Center</b>	112 - and ask for Poison Information (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Switzerland Tox Info Suisse</b>	145 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Regulation (EC) No 1272/2008 as amended

##### Health hazards

Carcinogenicity	Category 1A	H350 - May cause cancer.
Specific target organ toxicity - repeated exposure	Category 2	H373 - May cause damage to organs through prolonged or repeated exposure. H373 - May cause damage to organs ( ) through prolonged or repeated exposure by inhalation.

### 2.2. Label elements

## Label according to Regulation (EC) No. 1272/2008 as amended

### UFI:

Austria: 86D0-Q0TW-2001-R7UU  
Belgium: 86D0-Q0TW-2001-R7UU  
Bulgaria: 86D0-Q0TW-2001-R7UU  
Croatia: 86D0-Q0TW-2001-R7UU  
Cyprus: 86D0-Q0TW-2001-R7UU  
Czech Republic: 86D0-Q0TW-2001-R7UU  
Denmark: 86D0-Q0TW-2001-R7UU  
Estonia: 86D0-Q0TW-2001-R7UU  
EU: 86D0-Q0TW-2001-R7UU  
Finland: 86D0-Q0TW-2001-R7UU  
France: 86D0-Q0TW-2001-R7UU  
Germany: 86D0-Q0TW-2001-R7UU  
Greece: 86D0-Q0TW-2001-R7UU  
Hungary: 86D0-Q0TW-2001-R7UU  
Iceland: 86D0-Q0TW-2001-R7UU  
Ireland: 86D0-Q0TW-2001-R7UU  
Italy: 86D0-Q0TW-2001-R7UU  
Latvia: 86D0-Q0TW-2001-R7UU  
Lithuania: 86D0-Q0TW-2001-R7UU  
Luxembourg: 86D0-Q0TW-2001-R7UU  
Malta: 86D0-Q0TW-2001-R7UU  
Netherlands: 86D0-Q0TW-2001-R7UU  
Norway: 86D0-Q0TW-2001-R7UU  
Poland: 86D0-Q0TW-2001-R7UU  
Portugal: 86D0-Q0TW-2001-R7UU  
Romania: 86D0-Q0TW-2001-R7UU  
Slovakia: 86D0-Q0TW-2001-R7UU  
Slovenia: 86D0-Q0TW-2001-R7UU  
Spain: 86D0-Q0TW-2001-R7UU  
Sweden: 86D0-Q0TW-2001-R7UU

### Contains:

Crystalline SiO<sub>2</sub> (Quartz), Glass, Oxide

### Hazard pictograms



### Signal word

Danger

### Hazard statements

H350 May cause cancer.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H373 May cause damage to organs ( ) through prolonged or repeated exposure by inhalation.

### Precautionary statements

#### Prevention

P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P260 Do not breathe mist/vapors.  
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

#### Response

P308 + P313 IF exposed or concerned: Get medical advice/attention.

#### Storage

P405 Store locked up.

#### Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### Supplemental label information

Restricted to professional users. 99,24% of the mixture consists of component(s) of unknown acute dermal toxicity. 79,72% of the mixture consists of component(s) of unknown acute inhalation toxicity. 99,24% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 99,24% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

### 2.3. Other hazards

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. The mixture does not contain any substances included in the list established in accordance with REACH Article 59(1) for having endocrine disrupting properties at a concentration equal to or greater than 0.1% by weight.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

## General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Crystalline SiO <sub>2</sub> (Quartz)	60 - 100	14808-60-7 238-878-4	-	-	#
<b>Classification:</b> Carc. 1A;H350					
Glass, Oxide	10 - 30	65997-17-3 266-046-0	-	650-016-00-2	#
<b>Classification:</b> Carc. 2;H351					
Other components below reportable levels	< 1				

## List of abbreviations and symbols that may be used above

ATE: Acute toxicity estimate.

M: M-factor

vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

#: This substance has been assigned Union workplace exposure limit(s).

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**Composition comments** The full text for all H-statements is displayed in section 16.

## SECTION 4: First aid measures

**General information** IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 4.1. Description of first aid measures

**Inhalation** If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

**Skin contact** Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact** Rinse with water. Get medical attention if irritation develops and persists.

**Ingestion** Rinse mouth. Get medical attention if symptoms occur.

**4.2. Most important symptoms and effects, both acute and delayed** Coughing. Prolonged exposure may cause chronic effects.

**4.3. Indication of any immediate medical attention and special treatment needed** Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

## SECTION 5: Firefighting measures

**General fire hazards** No unusual fire or explosion hazards noted.

### 5.1. Extinguishing media

**Suitable extinguishing media** Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

**5.2. Special hazards arising from the substance or mixture** During fire, gases hazardous to health may be formed.

### 5.3. Advice for firefighters

**Special protective equipment for firefighters** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Special fire fighting procedures** Move containers from fire area if you can do so without risk.

**Specific methods** Use standard firefighting procedures and consider the hazards of other involved materials.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** Do not breathe mist/vapors.

**For emergency responders** Keep unnecessary personnel away. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**6.2. Environmental precautions** Avoid discharge into drains, water courses or onto the ground.

### 6.3. Methods and material for containment and cleaning up

The product is immiscible with water and will spread on the water surface.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. The product is insoluble in water.

### 6.4. Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapors. Avoid prolonged exposure. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

### 7.2. Conditions for safe storage, including any incompatibilities

Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

### 7.3. Specific end use(s)

Observe industrial sector guidance on best practices.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001, as amended

Components	Type	Value	Form
Crystalline SiO <sub>2</sub> (Quartz) (CAS 14808-60-7)	MAK	0,05 mg/m <sup>3</sup>	Respirable dust.

##### Austria. OELs. TRK List, Grenzwerteverordnung, BGBl. II, no. 429/2011, as amended

Components	Type	Value	Form
Glass, Oxide (CAS 65997-17-3)	TWA	300000 fibers/m <sup>3</sup>	Fiber.

##### Belgium. OEL. Exposure Limit Values to Chemical Substances at Work, Code of Well-being at work, Book VI, Title 1 - Chemical agents, as amended

Components	Type	Value	Form
Crystalline SiO <sub>2</sub> (Quartz) (CAS 14808-60-7)	TWA	0,1 mg/m <sup>3</sup>	Respirable dust.

##### Bulgaria. OEL values of carcinogens and mutagens at work (Reg. 10/2003 on prot. from carcinogens and mutagens at work, Ann. 1), as amended

Components	Type	Value	Form
Crystalline SiO <sub>2</sub> (Quartz) (CAS 14808-60-7)	TWA	0,1 mg/m <sup>3</sup>	Respirable fraction and dust
Glass, Oxide (CAS 65997-17-3)	TWA	0,3 fibers/cm <sup>3</sup>	Fiber.

##### Croatia. OELs (GVI). Regulation on Protection of Workers against Exposure to Dangerous Chemicals at Work, OELs and Biological Limit Values, Annex I (NN 91/2018), as amended

Components	Type	Value
Crystalline SiO <sub>2</sub> (Quartz) (CAS 14808-60-7)	MAC	0,1 mg/m <sup>3</sup>
Glass, Oxide (CAS 65997-17-3)	MAC	0,3 fibers/cm <sup>3</sup>

##### Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended

Components	Type	Value	Form
Glass, Oxide (CAS 65997-17-3)	TWA	10 mg/m <sup>3</sup>	Fiber or dust.

**Czech Republic. Occupational exposure limit values of chemicals at work (Decree on protection of health at work, 361/2007, Annex 2, Part A & Annex 3, Part A, as amended)**

Components	Type	Value	Form
Crystalline SiO <sub>2</sub> (Quartz) (CAS 14808-60-7)	TWA	0,1 mg/m <sup>3</sup>	Respirable dust.

**Denmark. Work Environment Authority. Exposure Limits for Substances & Materials, Annex 2**

Components	Type	Value	Form
Crystalline SiO <sub>2</sub> (Quartz) (CAS 14808-60-7)	TLV	0,3 mg/m <sup>3</sup>	Total
		0,1 mg/m <sup>3</sup>	Respirable.
Glass, Oxide (CAS 65997-17-3)	TLV	0,3 fibers/cm <sup>3</sup>	Fiber.

**Estonia. OELs. Occupational Exposure Limits of Hazardous Substances (Regulation No. 105/2001, Annex), as amended**

Components	Type	Value	Form
Crystalline SiO <sub>2</sub> (Quartz) (CAS 14808-60-7)	TWA	0,1 mg/m <sup>3</sup>	Fine dust, respiratory fraction
Glass, Oxide (CAS 65997-17-3)	TWA	1 fibers/ml	

**Finland. Government Decree on Work-related Cancer Risks**

Components	Type	Value	Form
Glass, Oxide (CAS 65997-17-3)	TWA	0,3 fibers/cm <sup>3</sup>	Fiber.

**Finland. HTP-arvot, App 3., Binding Limit Values, Social Affairs and Ministry of Health**

Components	Type	Value	Form
Crystalline SiO <sub>2</sub> (Quartz) (CAS 14808-60-7)	TWA	0,05 mg/m <sup>3</sup>	Respirable.
Glass, Oxide (CAS 65997-17-3)	TWA	0,3 fibers/cm <sup>3</sup>	Respirable.

**France. OELs. Occupational Exposure Limits as Prescribed by Art. R.4412-149 of Labor Code, as amended**

Components	Type	Value	Form
Crystalline SiO <sub>2</sub> (Quartz) (CAS 14808-60-7)	VME	0,1 mg/m <sup>3</sup>	Respirable dust.

**France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984**

Components	Type	Value	Form
Crystalline SiO <sub>2</sub> (Quartz) (CAS 14808-60-7)	VME	0,1 mg/m <sup>3</sup>	Respirable fraction.

**Regulatory status:** Regulatory binding (VRC)

**Hungary. OELs. Decree on protection of workers exposed to chemical agents (5/2020. (II.6)), Annex 1&2, as amended**

Components	Type	Value	Form
Crystalline SiO <sub>2</sub> (Quartz) (CAS 14808-60-7)	TWA	0,1 mg/m <sup>3</sup>	Respirable dust.
Glass, Oxide (CAS 65997-17-3)	TWA	1 fibers/cm <sup>3</sup>	Fibrous dust.

**Iceland. OELs. Regulation 390/2009 on Pollution Limits and Measures to Reduce Pollution at the Workplace, as amended**

Components	Type	Value	Form
Crystalline SiO <sub>2</sub> (Quartz) (CAS 14808-60-7)	TWA	0,3 mg/m <sup>3</sup>	Total dust.
		0,1 mg/m <sup>3</sup>	Respirable dust.
Glass, Oxide (CAS 65997-17-3)	TWA	1 fibers/cm <sup>3</sup>	Fiber.

**Ireland. OELVs, Schedules 1 & 2, Code of Practice for Chemical Agents and Carcinogens Regulations**

Components	Type	Value	Form
Crystalline SiO <sub>2</sub> (Quartz) (CAS 14808-60-7)	TWA	0,1 mg/m <sup>3</sup>	Respirable dust.
Glass, Oxide (CAS 65997-17-3)	TWA	2 fibers/cm <sup>3</sup>	
		5 mg/m <sup>3</sup>	

**Italy. OELs (Legislative Decree n.81, 9 April 2008), as amended**

Components	Type	Value	Form
Crystalline SiO <sub>2</sub> (Quartz) (CAS 14808-60-7)	TWA	0,025 mg/m <sup>3</sup>	Respirable fraction.

**Latvia. OELs. Occupational Exposure Limits of Chemical Substances at Workplace (Reg. No. 325/ 2007, L.V. 80, Annex 1), as amended**

Components	Type	Value	Form
Crystalline SiO <sub>2</sub> (Quartz) (CAS 14808-60-7)	TWA	0,1 mg/m <sup>3</sup>	Respirable dust.
Glass, Oxide (CAS 65997-17-3)	TWA	0,3 fibers/cm <sup>3</sup>  2 mg/m <sup>3</sup>	

**Lithuania. OELs. Occupational Exposure Limit Values for Chemical Substances (Hygiene Norm HN 23:2011; Order No. V-824/A1-389), as amended**

Components	Type	Value	Form
Crystalline SiO <sub>2</sub> (Quartz) (CAS 14808-60-7)	TWA	0,1 mg/m <sup>3</sup>	Respirable fraction.
Glass, Oxide (CAS 65997-17-3)	TWA	1 fibers/cm <sup>3</sup>	Fiber.

**Luxembourg. Chemical Substances Prohibited at Work (Annex III), G.D.R. of 14 November 2016, OJ Memorial A, n ° 235/2016, as amended**

Components	Type	Value	Form
Crystalline SiO <sub>2</sub> (Quartz) (CAS 14808-60-7)	TWA	0,1 mg/m <sup>3</sup>	Respirable dust.

**Netherlands. OELs per Annex XIII of Working Conditions Regulation (Staatscourant no. 252, 29 December 2006), as amended**

Components	Type	Value	Form
Crystalline SiO <sub>2</sub> (Quartz) (CAS 14808-60-7)	TWA	0,075 mg/m <sup>3</sup>	Respirable dust.

**Norway. Regulation No. 1358 on Measures and Limit Values for Physical and Chemical Factors in Work Environment and Infection Groups for Biological Factors, as amended**

Components	Type	Value	Form
Crystalline SiO <sub>2</sub> (Quartz) (CAS 14808-60-7)	TLV	0,3 mg/m <sup>3</sup>	Total dust.
		0,05 mg/m <sup>3</sup>	Respirable dust.
Glass, Oxide (CAS 65997-17-3)	TLV	5 mg/m <sup>3</sup>	Total dust.

**Poland. Maximum permissible concentrations and intensities of harmful factors in the work environment (Dz.U.Poz. 1286/2018, Annex 1)**

Components	Type	Value	Form
Crystalline SiO <sub>2</sub> (Quartz) (CAS 14808-60-7)	TWA	0,1 mg/m <sup>3</sup>	Respirable fraction.
Glass, Oxide (CAS 65997-17-3)	TWA	1 fibers/cm <sup>3</sup>	Respirable fibers.

**Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796-2014)**

Components	Type	Value	Form
Crystalline SiO <sub>2</sub> (Quartz) (CAS 14808-60-7)	TWA	0,025 mg/m <sup>3</sup>	Respirable fraction.
Glass, Oxide (CAS 65997-17-3)	TWA	0,2 fibers/cm <sup>3</sup>  5 mg/m <sup>3</sup>	Fiber.  Inhalable fraction.

**Slovakia. OELs for carcinogens and mutagens. Regulation No. 356/2006 on carcinogenic and mutagenic substances, as amended**

Components	Type	Value	Form
Crystalline SiO <sub>2</sub> (Quartz) (CAS 14808-60-7)	TWA	0,1 mg/m <sup>3</sup>	Respirable fraction.

**Slovakia. OELs. Maximum permissible exposure limits for chemical factors in workplace air (Regulation No 355/2006, Annex 1, Table 1, as amended)**

Components	Type	Value
Glass, Oxide (CAS 65997-17-3)	TWA	2 fibers/cm3

**Spain. OELs. INSST, Límites de Exposición Profesional Para Agentes Químicos, Table 1-Valores Límites Ambientales (VLAs)**

Components	Type	Value	Form
Crystalline SiO2 (Quartz) (CAS 14808-60-7)	TWA	0,05 mg/m3	Respirable fraction.
Glass, Oxide (CAS 65997-17-3)	TWA	0,3 fibers/cm3	Fiber.

**Sweden. OELs (Annex 1). Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2018:1), as amended**

Components	Type	Value	Form
Crystalline SiO2 (Quartz) (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.
Glass, Oxide (CAS 65997-17-3)	TWA	1 fibers/ml	

**Switzerland. SUVA Grenzwerte am Arbeitsplatz: Aktuelle MAK-Werte**

Components	Type	Value	Form
Crystalline SiO2 (Quartz) (CAS 14808-60-7)	TWA	0,15 mg/m3	Respirable fraction.

**UK. OELs. Workplace Exposure Limits (WELs) (EH40/2005 (Fourth Edition 2020)), Table 1**

Components	Type	Value	Form
Crystalline SiO2 (Quartz) (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable.

**EU. OELs, Directive 2004/37/EC on carcinogen and mutagens from Annex III, Part A, as amended**

Components	Type	Value	Form
Crystalline SiO2 (Quartz) (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable fraction and dust
Glass, Oxide (CAS 65997-17-3)	TWA	0,3 fibers/ml	

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Recommended monitoring procedures** Follow standard monitoring procedures.

**Derived no effect levels (DNELs)** Not available.

**Predicted no effect concentrations (PNECs)** Not available.

## 8.2. Exposure controls

**Appropriate engineering controls** Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

### Individual protection measures, such as personal protective equipment

**General information** Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye/face protection** Chemical respirator with organic vapor cartridge and full facepiece.

#### Skin protection

**- Hand protection** Wear appropriate chemical resistant gloves.

**- Other** Use of an impervious apron is recommended.

**Respiratory protection** Chemical respirator with organic vapor cartridge and full facepiece.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**Hygiene measures** Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.



**Environmental exposure controls**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state	Liquid.
Form	Liquid.
Color	Red., Grey or Pale straw-yellow
Odor	None.
Melting point/freezing point	3110 °F (1710 °C)
Boiling point or initial boiling point and boiling range	4226 °F (2330 °C)
Flammability	Not applicable.
Flash point	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
pH	7
Kinematic viscosity	Not available.
Solubility	
Solubility (water)	insoluble in water
Partition coefficient (n-octanol/water) (log value)	Not available.
Vapor pressure	-0,01 hPa estimated
Density and/or relative density	
Density	2,64 g/cm3 estimated
Vapor density	Not available.
Particle characteristics	Not available.

**9.2. Other information**

**9.2.1. Information with regard to physical hazard classes** No relevant additional information available.

**9.2.2. Other safety characteristics**

Specific gravity	2,64 estimated 2,57
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**SECTION 10: Stability and reactivity**

<b>10.1. Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>10.2. Chemical stability</b>	Material is stable under normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>10.4. Conditions to avoid</b>	Contact with incompatible materials.
<b>10.5. Incompatible materials</b>	Powerful oxidizers. Chlorine.
<b>10.6. Hazardous decomposition products</b>	No hazardous decomposition products are known.

**SECTION 11: Toxicological information**

**General information** Occupational exposure to the substance or mixture may cause adverse effects.

**Information on likely routes of exposure**

Inhalation	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

**Symptoms** Coughing.

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Acute toxicity** Not known.

<b>Skin corrosion/irritation</b>	Due to partial or complete lack of data the classification is not possible.
<b>Serious eye damage/eye irritation</b>	Due to partial or complete lack of data the classification is not possible.
<b>Respiratory sensitization</b>	Due to partial or complete lack of data the classification is not possible.
<b>Skin sensitization</b>	Due to partial or complete lack of data the classification is not possible.
<b>Germ cell mutagenicity</b>	Due to partial or complete lack of data the classification is not possible.
<b>Carcinogenicity</b>	May cause cancer.

**Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)**

Glass, Oxide (CAS 65997-17-3)

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Crystalline SiO<sub>2</sub> (Quartz) (CAS 14808-60-7)

1 Carcinogenic to humans.

**Slovenia. CMR. Protection of workers from exposure to carcinogen and mutagen agents (ULRS 101/2005, as amended)**

Glass, Oxide (CAS 65997-17-3)

Carcinogenic, Category 1B.

<b>Reproductive toxicity</b>	Due to partial or complete lack of data the classification is not possible.
<b>Specific target organ toxicity - single exposure</b>	Due to partial or complete lack of data the classification is not possible.
<b>Specific target organ toxicity - repeated exposure</b>	May cause damage to organs through prolonged or repeated exposure.
<b>Aspiration hazard</b>	Due to partial or complete lack of data the classification is not possible.
<b>Mixture versus substance information</b>	No information available.

## 11.2. Information on other hazards

<b>Endocrine disrupting properties</b>	This mixture does not contain any substances having endocrine disrupting properties with respect to human health as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.
<b>Other information</b>	Not available.

## SECTION 12: Ecological information

<b>12.1. Toxicity</b>	Based on available data, the classification criteria are not met for hazardous to the aquatic environment.
<b>12.2. Persistence and degradability</b>	No data is available on the degradability of any ingredients in the mixture.
<b>12.3. Bioaccumulative potential</b>	
<b>Partition coefficient n-octanol/water (log K<sub>ow</sub>)</b>	Not available.
<b>Bioconcentration factor (BCF)</b>	Not available.
<b>12.4. Mobility in soil</b>	No data available.
<b>12.5. Results of PBT and vPvB assessment</b>	This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.
<b>12.6. Endocrine disrupting properties</b>	This mixture does not contain any substances having endocrine disrupting properties with respect to the environment as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.
<b>12.7. Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Residual waste</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
<b>EU waste code</b>	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Disposal methods/information</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Special precautions</b>	Dispose in accordance with all applicable regulations.

## SECTION 14: Transport information

### ADR

14.1. UN number	Not regulated as dangerous goods.
14.2. UN proper shipping name	Not regulated as dangerous goods.
14.3. Transport hazard class(es)	
Class	Not assigned.
Subsidiary risk	-
Hazard No. (ADR)	Not assigned.
Tunnel restriction code	Not assigned.
14.4. Packing group	-
14.5. Environmental hazards	No.
14.6. Special precautions for user	Not assigned.

### RID

14.1. UN number	Not regulated as dangerous goods.
14.2. UN proper shipping name	Not regulated as dangerous goods.
14.3. Transport hazard class(es)	
Class	Not assigned.
Subsidiary risk	-
14.4. Packing group	-
14.5. Environmental hazards	No.
14.6. Special precautions for user	Not assigned.

### ADN

14.1. UN number	Not regulated as dangerous goods.
14.2. UN proper shipping name	Not regulated as dangerous goods.
14.3. Transport hazard class(es)	
Class	Not assigned.
Subsidiary risk	-
14.4. Packing group	-
14.5. Environmental hazards	No.
14.6. Special precautions for user	Not assigned.

### IATA

14.1. UN number	Not regulated as dangerous goods.
14.2. UN proper shipping name	Not regulated as dangerous goods.
14.3. Transport hazard class(es)	
Class	Not assigned.
Subsidiary risk	-
14.4. Packing group	-
14.5. Environmental hazards	No.
14.6. Special precautions for user	Not assigned.

### IMDG

14.1. UN number	Not regulated as dangerous goods.
14.2. UN proper shipping name	Not regulated as dangerous goods.
14.3. Transport hazard class(es)	
Class	Not assigned.
Subsidiary risk	-
14.4. Packing group	-
14.5. Environmental hazards	
Marine pollutant	No.
EmS	Not assigned.
14.6. Special precautions for user	Not assigned.
14.7. Maritime transport in bulk according to IMO instruments	Not established.

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**

Not listed.

**Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

#### UFI:

Austria: 86D0-Q0TW-2001-R7UU  
Belgium: 86D0-Q0TW-2001-R7UU  
Bulgaria: 86D0-Q0TW-2001-R7UU  
Croatia: 86D0-Q0TW-2001-R7UU  
Cyprus: 86D0-Q0TW-2001-R7UU  
Czech Republic: 86D0-Q0TW-2001-R7UU  
Denmark: 86D0-Q0TW-2001-R7UU  
Estonia: 86D0-Q0TW-2001-R7UU  
EU: 86D0-Q0TW-2001-R7UU  
Finland: 86D0-Q0TW-2001-R7UU  
France: 86D0-Q0TW-2001-R7UU  
Germany: 86D0-Q0TW-2001-R7UU  
Greece: 86D0-Q0TW-2001-R7UU  
Hungary: 86D0-Q0TW-2001-R7UU  
Iceland: 86D0-Q0TW-2001-R7UU  
Ireland: 86D0-Q0TW-2001-R7UU  
Italy: 86D0-Q0TW-2001-R7UU  
Latvia: 86D0-Q0TW-2001-R7UU  
Lithuania: 86D0-Q0TW-2001-R7UU  
Luxembourg: 86D0-Q0TW-2001-R7UU  
Malta: 86D0-Q0TW-2001-R7UU  
Netherlands: 86D0-Q0TW-2001-R7UU  
Norway: 86D0-Q0TW-2001-R7UU  
Poland: 86D0-Q0TW-2001-R7UU  
Portugal: 86D0-Q0TW-2001-R7UU  
Romania: 86D0-Q0TW-2001-R7UU  
Slovakia: 86D0-Q0TW-2001-R7UU  
Slovenia: 86D0-Q0TW-2001-R7UU  
Spain: 86D0-Q0TW-2001-R7UU  
Sweden: 86D0-Q0TW-2001-R7UU

#### Authorizations

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

#### Restrictions on use

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use, as amended**  
- Conditions of restriction given for the associated entry number should be considered

Glass, Oxide (CAS 65997-17-3)

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended**

Crystalline SiO<sub>2</sub> (Quartz) (CAS 14808-60-7)

Glass, Oxide (CAS 65997-17-3)

#### Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

**National regulations** According to Directive 92/85/EEC as amended, pregnant women should not work with the product, if there is the least risk of exposure.

Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended. Follow national regulation on the protection of workers from the risks of exposure to carcinogens and mutagens at work, in accordance with Directive 2004/37/EC, as amended.

#### France regulations

##### France INRS Table of Occupational Diseases

Crystalline SiO<sub>2</sub> (Quartz) (CAS 14808-60-7)

Affections consécutives à l'inhalation de poussières minérales renfermant de la silice cristalline (quartz, cristobalite, tridymite), des silicates cristallins (kaolin, talc), du graphite ou de la houille 25

#### Product registration number

<b>Austria</b>	UFI: 86D0-Q0TW-2001-R7UU
<b>Belgium</b>	UFI: 86D0-Q0TW-2001-R7UU
<b>Czech Republic</b>	UFI: 86D0-Q0TW-2001-R7UU
<b>Denmark</b>	UFI: 86D0-Q0TW-2001-R7UU
<b>European Union</b>	UFI: 86D0-Q0TW-2001-R7UU
<b>Finland</b>	UFI: 86D0-Q0TW-2001-R7UU
<b>France</b>	UFI: 86D0-Q0TW-2001-R7UU
<b>Germany</b>	UFI: 86D0-Q0TW-2001-R7UU
<b>Greece</b>	UFI: 86D0-Q0TW-2001-R7UU
<b>Hungary</b>	UFI: 86D0-Q0TW-2001-R7UU
<b>Italy</b>	UFI: 86D0-Q0TW-2001-R7UU
<b>Netherlands</b>	UFI: 86D0-Q0TW-2001-R7UU
<b>Norway</b>	UFI: 86D0-Q0TW-2001-R7UU
<b>Poland</b>	UFI: 86D0-Q0TW-2001-R7UU
<b>Portugal</b>	UFI: 86D0-Q0TW-2001-R7UU
<b>Slovakia</b>	UFI: 86D0-Q0TW-2001-R7UU
<b>Slovenia</b>	UFI: 86D0-Q0TW-2001-R7UU
<b>Spain</b>	UFI: 86D0-Q0TW-2001-R7UU
<b>Sweden</b>	UFI: 86D0-Q0TW-2001-R7UU
<b>Switzerland</b>	UFI: 86D0-Q0TW-2001-R7UU

#### 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

### SECTION 16: Other information

#### List of abbreviations

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.  
 ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.  
 AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).  
 CAS: Chemical Abstract Service.  
 CEN: European Committee for Standardization.  
 IATA: International Air Transport Association.  
 IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.  
 IMDG: International Maritime Dangerous Goods.  
 MAC: Maximum Allowed Concentration.  
 MARPOL: International Convention for the Prevention of Pollution from Ships.  
 PBT: Persistent, bioaccumulative and toxic.  
 RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.  
 STEL: Short term exposure limit.  
 TLV: Threshold Limit Value.  
 TWA: Time Weighted Average.  
 VLE: Exposure Limit Value.  
 VME: Exposure Average Value.  
 vPvB: Very persistent and very bioaccumulative.  
 Not available.

#### References

##### Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

##### Full text of any statements, which are not written out in full under sections 2 to 15

H350 May cause cancer.  
 H351 Suspected of causing cancer.

**Revision information**

None.

**Training information**

Follow training instructions when handling this material.

**Disclaimer**

ITW Performance Polymers cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.

# SAFETY DATA SHEET

Version #: 14

Issue date: 02-12-2014

Revision date: 07-27-2023

Supersedes date: 07-12-2023

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Trade name or designation of the mixture** Chockfast Red Hardener

**Registration number** -

**Synonyms** None.

**SKU#** GP107H

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** Not available.

**Uses advised against** None known.

### 1.3. Details of the supplier of the safety data sheet

**Company Name** ITW Performance Polymers

**Address** Bay 150  
Shannon Industrial Estate  
Co. Clare  
Ireland  
V14 DF82

**Contact Person** Customer Service

**Telephone Number** 353(61)771500  
353(61)471285

**Email** customerservice.shannon@itwpp.com

**Emergency Phone Number** 44(0) 1235 239 670 (24 hours)

### 1.4. Emergency telephone number

**General in EU** 112 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

**Austria National Poisons Information Center** +431 406 4343 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

**Belgium National Poisons Control Center** 070 245 245 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

**Bulgaria National Toxicological Information Center** +359 2 9154 233 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

**Croatia Poisons Information Center** +385 1 2348 342 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)

**Cyprus Poison Center** 1401 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

**Czech Republic National Poisons Information Center** +420 224 919 293, or +420 224 915 402 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)

**Denmark National Poisons Control Center** +45 82 12 12 12 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

**Estonia National Poisons Information Center** 16662 or abroad: (+372) 626 9390 (Monday 9:00AM to Saturday 9:00AM (closed on Sundays and on national holidays). SDS/Product information may not be available for the Emergency Service.)

**Finland National Poison Information Center** (09) 471 977 (direct) or (09) 4711 (exchange) (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

**France National Poisons Control Center** ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

#### 1.4. Emergency telephone number

<b>Greece Poison Information Centre</b>	(0030) 2107793777 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Hungary National Emergency Phone Number</b>	+36-80-201-199 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Iceland Poison Center</b>	(+354) 543 2222 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Latvia Emergency medical aid</b>	113
<b>Latvia Poison and Drug Information Center</b>	+371 67042473 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Lithuania Neatidėliotina informacija apsinuodijus</b>	+370 5 236 20 52 or +37068753378 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)
<b>Malta Accident and Emergency Department</b>	2545 4030 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)
<b>Netherlands National Poisons Information Center (NVIC)</b>	NVIC: +31 (0)88 755 8000 (Only for the purpose of informing medical personnel in cases of acute intoxications)
<b>Norway Norwegian Poison Information Center</b>	22 59 13 00 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Portugal Poison Center</b>	800 250 250 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Romania Biroul RSI si Informare Toxicologica</b>	021.318.36.06 (Available 8:00AM-3:00PM. SDS/Product information may not be available for the Emergency Service.)
<b>Slovakia National Toxicological Information Center</b>	+421 2 5477 4166 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Spain Toxicology Information Service</b>	+ 34 91 562 04 20 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Sweden National Poison Information Center</b>	112 - and ask for Poison Information (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Switzerland Tox Info Suisse</b>	145 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

## SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Regulation (EC) No 1272/2008 as amended

##### Health hazards

Acute toxicity, oral	Category 4	H302 - Harmful if swallowed.
Acute toxicity, dermal	Category 4	H312 - Harmful in contact with skin.
Skin corrosion/irritation	Category 1B	H314 - Causes severe skin burns and eye damage.
Serious eye damage/eye irritation	Category 1	H318 - Causes serious eye damage.
Skin sensitization	Category 1	H317 - May cause an allergic skin reaction.

##### Environmental hazards

Hazardous to the aquatic environment, long-term aquatic hazard	Category 2	H411 - Toxic to aquatic life with long lasting effects.
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#### 2.2. Label elements



**UFI:**

Austria: N4D0-704G-R00H-3W8S  
 Belgium: N4D0-704G-R00H-3W8S  
 Bulgaria: N4D0-704G-R00H-3W8S  
 Croatia: N4D0-704G-R00H-3W8S  
 Cyprus: N4D0-704G-R00H-3W8S  
 Czech Republic: N4D0-704G-R00H-3W8S  
 Denmark: N4D0-704G-R00H-3W8S  
 Estonia: N4D0-704G-R00H-3W8S  
 EU: N4D0-704G-R00H-3W8S  
 Finland: N4D0-704G-R00H-3W8S  
 France: N4D0-704G-R00H-3W8S  
 Germany: N4D0-704G-R00H-3W8S  
 Greece: N4D0-704G-R00H-3W8S  
 Hungary: N4D0-704G-R00H-3W8S  
 Iceland: N4D0-704G-R00H-3W8S  
 Ireland: N4D0-704G-R00H-3W8S  
 Italy: N4D0-704G-R00H-3W8S  
 Latvia: N4D0-704G-R00H-3W8S  
 Lithuania: N4D0-704G-R00H-3W8S  
 Luxembourg: N4D0-704G-R00H-3W8S  
 Malta: N4D0-704G-R00H-3W8S  
 Netherlands: N4D0-704G-R00H-3W8S  
 Norway: N4D0-704G-R00H-3W8S  
 Poland: N4D0-704G-R00H-3W8S  
 Portugal: N4D0-704G-R00H-3W8S  
 Romania: N4D0-704G-R00H-3W8S  
 Slovakia: N4D0-704G-R00H-3W8S  
 Slovenia: N4D0-704G-R00H-3W8S  
 Spain: N4D0-704G-R00H-3W8S  
 Sweden: N4D0-704G-R00H-3W8S

**Contains:**

2,2'-iminodiethylamine; diethylenetriamine, 3,6,9-triazaundecamethylenediamine; tetraethylenepentamine, Amidoamine

**Hazard pictograms**



**Signal word**

Danger

**Hazard statements**

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.

**Precautionary statements**

**Prevention**

P260	Do not breathe mist/vapors.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

**Response**

P330	Rinse mouth.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.

**Storage**

P405	Store locked up.
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<b>Disposal</b>	P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Supplemental label information</b>	100% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment.	
<b>2.3. Other hazards</b>	This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. The mixture does not contain any substances included in the list established in accordance with REACH Article 59(1) for having endocrine disrupting properties at a concentration equal to or greater than 0.1% by weight.	

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Amidoamine	60 - 100	68953-36-6 273-201-6	-	-	
<b>Classification:</b> -					
3,6,9-triazaundecamethylenediamine; tetraethylenepentamine	5 - < 10	112-57-2 203-986-2	-	612-060-00-0	
<b>Classification:</b> Acute Tox. 4;H302;(ATE: 500 mg/kg bw), Acute Tox. 4;H312;(ATE: 1100 mg/kg bw), Skin Corr. 1B;H314, Eye Dam. 1;H318, Skin Sens. 1;H317, Aquatic Chronic 2;H411					
2,2'-iminodiethylamine; diethylenetriamine	3 - < 5	111-40-0 203-865-4	01-2119473793-27-0000	612-058-00-X	
<b>Classification:</b> Acute Tox. 4;H302;(ATE: 500 mg/kg bw), Acute Tox. 4;H312;(ATE: 1100 mg/kg bw), Skin Corr. 1B;H314, Eye Dam. 1;H318, Skin Sens. 1;H317					
Other components below reportable levels	5 - < 10				

#### List of abbreviations and symbols that may be used above

ATE: Acute toxicity estimate.

M: M-factor

vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

#: This substance has been assigned Union workplace exposure limit(s).

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**Composition comments** The full text for all H-statements is displayed in section 16.

## SECTION 4: First aid measures

**General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

### 4.1. Description of first aid measures

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact** Remove contaminated clothing immediately and wash skin with soap and water. Chemical burns must be treated by a physician. Get medical advice/attention if you feel unwell. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

**Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

**Ingestion** Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

**4.2. Most important symptoms and effects, both acute and delayed** Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

**4.3. Indication of any immediate medical attention and special treatment needed** Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

## SECTION 5: Firefighting measures

**General fire hazards** No unusual fire or explosion hazards noted.

### 5.1. Extinguishing media

**Suitable extinguishing media** Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>5.2. Special hazards arising from the substance or mixture</b>	During fire, gases hazardous to health may be formed.
<b>5.3. Advice for firefighters</b>	
<b>Special protective equipment for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Special fire fighting procedures</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.

## SECTION 6: Accidental release measures

<b>6.1. Personal precautions, protective equipment and emergency procedures</b>	
<b>For non-emergency personnel</b>	Do not breathe mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
<b>For emergency responders</b>	Keep unnecessary personnel away. Ensure adequate ventilation. Avoid breathing mist/vapors. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.
<b>6.2. Environmental precautions</b>	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
<b>6.3. Methods and material for containment and cleaning up</b>	Prevent product from entering drains.  Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.  Never return spills to original containers for re-use.
<b>6.4. Reference to other sections</b>	For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

<b>7.1. Precautions for safe handling</b>	Do not breathe mist/vapors. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.
<b>7.2. Conditions for safe storage, including any incompatibilities</b>	Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).  Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended  ANNEX 1, PART 1 Categories of dangerous substances Hazard categories in accordance with Regulation (EC) No 1272/2008 - E2 Hazardous to the Aquatic Environment Chronic (Lower-tier requirements = 200 tons; Upper-tier requirements = 500 tons)
<b>7.3. Specific end use(s)</b>	Observe industrial sector guidance on best practices.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

**Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001, as amended**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	MAK	4 mg/m <sup>3</sup>  1 ppm

**Belgium. OEL. Exposure Limit Values to Chemical Substances at Work, Code of Well-being at work, Book VI, Title 1 - Chemical agents, as amended**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	TWA	4,3 mg/m3
		1 ppm

**Bulgaria. OELs. Ordinance No 13 on protection of workers against risks of exposure to chemical agents at work, as amended**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	TWA	4 mg/m3

**Croatia. OELs (GVI). Regulation on Protection of Workers against Exposure to Dangerous Chemicals at Work, OELs and Biological Limit Values, Annex I (NN 91/2018), as amended**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	MAC	4,3 mg/m3
		1 ppm

**Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	TWA	4 mg/m3
		1 ppm

**Czech Republic. Occupational exposure limit values of chemicals at work (Decree on protection of health at work, 361/2007, Annex 2, Part A & Annex 3, Part A, as amended)**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	Ceiling	8 mg/m3
	TWA	4 mg/m3

**Denmark. Work Environment Authority. Exposure Limits for Substances & Materials, Annex 2**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	TLV	4 mg/m3
		1 ppm

**Estonia. OELs. Occupational Exposure Limits of Hazardous Substances (Regulation No. 105/2001, Annex), as amended**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	STEL	10 mg/m3
		2 ppm
	TWA	4,5 mg/m3
		1 ppm

**Finland. HTP-arvot, App 3., Binding Limit Values, Social Affairs and Ministry of Health**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	STEL	13 mg/m3
		3 ppm
	TWA	4,3 mg/m3
		1 ppm

**France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	VME	4 mg/m3
<b>Regulatory status:</b>	Indicative limit (VL)	1 ppm
<b>Regulatory status:</b>	Indicative limit (VL)	

**Greece. OELs, Presidential Decree No. 307/1986, as amended**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	TWA	4 mg/m3
		1 ppm

**Hungary. OELs. Decree on protection of workers exposed to chemical agents (5/2020. (II.6)), Annex 1&2, as amended**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	STEL	8 mg/m3
	TWA	4 mg/m3

**Iceland. OELs. Regulation 390/2009 on Pollution Limits and Measures to Reduce Pollution at the Workplace, as amended**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	TWA	4,5 mg/m3
		1 ppm

**Ireland. OELVs, Schedules 1 & 2, Code of Practice for Chemical Agents and Carcinogens Regulations**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	TWA	4 mg/m3
		1 ppm

**Italy. OELs (Legislative Decree n.81, 9 April 2008), as amended**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	TWA	1 ppm

**Lithuania. OELs. Occupational Exposure Limit Values for Chemical Substances (Hygiene Norm HN 23:2011; Order No. V-824/A1-389), as amended**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	STEL	10 mg/m3
		2 ppm
	TWA	4,5 mg/m3
		1 ppm

**Norway. Regulation No. 1358 on Measures and Limit Values for Physical and Chemical Factors in Work Environment and Infection Groups for Biological Factors, as amended**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	TLV	4 mg/m3
		1 ppm

**Poland. Maximum permissible concentrations and intensities of harmful factors in the work environment (Dz.U.Poz. 1286/2018, Annex 1)**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	STEL	12 mg/m3
	TWA	4 mg/m3

**Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796-2014)**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	TWA	1 ppm

**Romania. OELs. Limit Values of Chemical Agents at Workplace (Regulation 1.218/2006, M.O 845, Annex 1, 3&4, as amended)**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	STEL	4 mg/m3
	TWA	1 ppm
		2 mg/m3
		0,5 ppm

**Spain. OELs. INSST, Límites de Exposición Profesional Para Agentes Químicos, Table 1-Valores Límites Ambientales (VLAs)**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	TWA	4,3 mg/m3
		1 ppm

**Sweden. OELs (Annex 1). Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2018:1), as amended**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	STEL	10 mg/m3
	TWA	2 ppm
		4,5 mg/m3
		1 ppm

**Switzerland. SUVA Grenzwerte am Arbeitsplatz: Aktuelle MAK-Werte**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	TWA	4 mg/m3
		1 ppm

**UK. OELs. Workplace Exposure Limits (WELs) (EH40/2005 (Fourth Edition 2020)), Table 1**

Components	Type	Value
2,2'-iminodiethylamine; diethylenetriamine (CAS 111-40-0)	TWA	4,3 mg/m3
		1 ppm

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Recommended monitoring procedures** Follow standard monitoring procedures.

**Derived no effect levels (DNELs)** Not available.

**Predicted no effect concentrations (PNECs)** Not available.

## Exposure guidelines

### Belgium OELs: Skin designation

2,2'-iminodiethylamine; diethylenetriamine  
(CAS 111-40-0) Can be absorbed through the skin.

### Cyprus OEL: Skin designation

2,2'-iminodiethylamine; diethylenetriamine  
(CAS 111-40-0) Can be absorbed through the skin.

### Denmark GV: Skin designation

2,2'-iminodiethylamine; diethylenetriamine  
(CAS 111-40-0) Can be absorbed through the skin.

### Estonia OELs: Skin designation

2,2'-iminodiethylamine; diethylenetriamine  
(CAS 111-40-0) Can be absorbed through the skin.

### Finland Exposure Limit Values: Skin designation

2,2'-iminodiethylamine; diethylenetriamine  
(CAS 111-40-0) Can be absorbed through the skin.

### Greece OEL: Skin designation

2,2'-iminodiethylamine; diethylenetriamine  
(CAS 111-40-0) Can be absorbed through the skin.

### Hungary OELs: Skin designation

2,2'-iminodiethylamine; diethylenetriamine  
(CAS 111-40-0) Can be absorbed through the skin.

### Iceland OELs: Skin designation

2,2'-iminodiethylamine; diethylenetriamine  
(CAS 111-40-0) Can be absorbed through the skin.

### Ireland Exposure Limit Values: Skin designation

2,2'-iminodiethylamine; diethylenetriamine  
(CAS 111-40-0) Can be absorbed through the skin.

### Italy OELs: Skin designation

2,2'-iminodiethylamine; diethylenetriamine  
(CAS 111-40-0) Danger of cutaneous absorption

### Lithuania OELs: Skin designation

2,2'-iminodiethylamine; diethylenetriamine  
(CAS 111-40-0) Can be absorbed through the skin.

### Norway Exposure Limit Values: Skin designation

2,2'-iminodiethylamine; diethylenetriamine  
(CAS 111-40-0) Can be absorbed through the skin.

### Portugal VLEs Norm on Occupational Exposure: Skin designation

2,2'-iminodiethylamine; diethylenetriamine  
(CAS 111-40-0) Can be absorbed through the skin.

### Romania OELs: Skin designation

2,2'-iminodiethylamine; diethylenetriamine  
(CAS 111-40-0) Can be absorbed through the skin.

### Spain OELs: Skin designation

2,2'-iminodiethylamine; diethylenetriamine  
(CAS 111-40-0) Can be absorbed through the skin.

### Sweden Threshold Limit Values: Skin designation

2,2'-iminodiethylamine; diethylenetriamine  
(CAS 111-40-0) Can be absorbed through the skin.

### Switzerland SUVA Limit Values at the Workplace: Skin designation

2,2'-iminodiethylamine; diethylenetriamine  
(CAS 111-40-0) Can be absorbed through the skin.

### UK EH40 WEL: Skin designation

2,2'-iminodiethylamine; diethylenetriamine  
(CAS 111-40-0) Can be absorbed through the skin.

## 8.2. Exposure controls

### Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

### Individual protection measures, such as personal protective equipment

#### General information

Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles) and a face shield. Face shield is recommended.
<b>Skin protection</b>	
- <b>Hand protection</b>	Wear appropriate chemical resistant gloves.
- <b>Other</b>	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>Hygiene measures</b>	Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.
<b>Environmental exposure controls</b>	Inform appropriate managerial or supervisory personnel of all environmental releases. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Amber.
<b>Odor</b>	Ammoniacal.
<b>Melting point/freezing point</b>	Not available.
<b>Boiling point or initial boiling point and boiling range</b>	>737,6 °F (>392 °C)
<b>Flammability</b>	Not applicable.
<b>Flash point</b>	>200,0 °F (>93,3 °C) Closed Cup
<b>Auto-ignition temperature</b>	609,8 °F (321 °C) estimated
<b>Decomposition temperature</b>	Not available.
<b>pH</b>	>7
<b>Kinematic viscosity</b>	Not available.
<b>Solubility</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water) (log value)</b>	Not available.
<b>Vapor pressure</b>	3,6 mm Hg @ 70F
<b>Density and/or relative density</b>	
<b>Density</b>	0,95 g/cm3
<b>Vapor density</b>	Not available.
<b>Particle characteristics</b>	Not available.

### 9.2. Other information

**9.2.1. Information with regard to physical hazard classes** No relevant additional information available.

#### 9.2.2. Other safety characteristics

**Specific gravity** 0,95

## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>10.2. Chemical stability</b>	Material is stable under normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>10.4. Conditions to avoid</b>	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>10.5. Incompatible materials</b>	Peroxides. Phenols.
<b>10.6. Hazardous decomposition products</b>	No hazardous decomposition products are known.



## SECTION 11: Toxicological information

<b>General information</b>	Occupational exposure to the substance or mixture may cause adverse effects.
<b>Information on likely routes of exposure</b>	
<b>Inhalation</b>	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
<b>Skin contact</b>	Causes severe skin burns. Harmful in contact with skin. May cause an allergic skin reaction.
<b>Eye contact</b>	Causes serious eye damage.
<b>Ingestion</b>	Causes digestive tract burns. Harmful if swallowed.
<b>Symptoms</b>	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
<b>11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008</b>	
<b>Acute toxicity</b>	Harmful in contact with skin. Harmful if swallowed.
<b>Skin corrosion/irritation</b>	Causes severe skin burns and eye damage.
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage.
<b>Respiratory sensitization</b>	Based on available data, the classification criteria are not met.
<b>Skin sensitization</b>	May cause an allergic skin reaction.
<b>Germ cell mutagenicity</b>	Due to partial or complete lack of data the classification is not possible.
<b>Carcinogenicity</b>	Due to partial or complete lack of data the classification is not possible.
<b>Reproductive toxicity</b>	Not applicable.
<b>Specific target organ toxicity - single exposure</b>	Due to partial or complete lack of data the classification is not possible.
<b>Specific target organ toxicity - repeated exposure</b>	Due to partial or complete lack of data the classification is not possible.
<b>Aspiration hazard</b>	Due to partial or complete lack of data the classification is not possible.
<b>Mixture versus substance information</b>	No information available.
<b>11.2. Information on other hazards</b>	
<b>Endocrine disrupting properties</b>	This mixture does not contain any substances having endocrine disrupting properties with respect to human health as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.
<b>Other information</b>	Not available.

## SECTION 12: Ecological information

<b>12.1. Toxicity</b>	Toxic to aquatic life with long lasting effects. Due to partial or complete lack of data the classification for hazardous to the aquatic environment, acute hazard, is not possible.
<b>12.2. Persistence and degradability</b>	No data is available on the degradability of any ingredients in the mixture.
<b>12.3. Bioaccumulative potential</b>	
<b>Partition coefficient n-octanol/water (log K<sub>ow</sub>)</b>	3,6,9-triazaundecamethylenediamine; tetraethylenepentamine 1,503
<b>Bioconcentration factor (BCF)</b>	Not available.
<b>12.4. Mobility in soil</b>	No data available.
<b>12.5. Results of PBT and vPvB assessment</b>	This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.
<b>12.6. Endocrine disrupting properties</b>	This mixture does not contain any substances having endocrine disrupting properties with respect to the environment as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.
<b>12.7. Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Residual waste</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
<b>EU waste code</b>	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Disposal methods/information</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Special precautions</b>	Dispose in accordance with all applicable regulations.

## SECTION 14: Transport information

### ADR

<b>14.1. UN number</b>	UN1760
<b>14.2. UN proper shipping name</b>	CORROSIVE LIQUID, N.O.S. (Amidoamine)
<b>14.3. Transport hazard class(es)</b>	
Class	8
Subsidiary risk	-
Label(s)	8
Hazard No. (ADR)	80
Tunnel restriction code	E
<b>14.4. Packing group</b>	III
<b>14.5. Environmental hazards</b>	No.
<b>14.6. Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

### RID

<b>14.1. UN number</b>	UN1760
<b>14.2. UN proper shipping name</b>	CORROSIVE LIQUID, N.O.S. (Amidoamine)
<b>14.3. Transport hazard class(es)</b>	
Class	8
Subsidiary risk	-
Label(s)	8
<b>14.4. Packing group</b>	III
<b>14.5. Environmental hazards</b>	No.
<b>14.6. Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

### ADN

<b>14.1. UN number</b>	UN1760
<b>14.2. UN proper shipping name</b>	Corrosive Liquid, N.o.s. (Amidoamine)
<b>14.3. Transport hazard class(es)</b>	
Class	8
Subsidiary risk	-
Label(s)	8
<b>14.4. Packing group</b>	III
<b>14.5. Environmental hazards</b>	No.
<b>14.6. Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

### IATA

<b>14.1. UN number</b>	UN1760
<b>14.2. UN proper shipping name</b>	Corrosive liquid, n.o.s. (Amidoamine)
<b>14.3. Transport hazard class(es)</b>	
Class	8
Subsidiary risk	-
<b>14.4. Packing group</b>	III
<b>14.5. Environmental hazards</b>	No.
<b>ERG Code</b>	8L
<b>14.6. Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

#### Other information

Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

#### IMDG

14.1. UN number	UN1760
14.2. UN proper shipping name	CORROSIVE LIQUID, N.O.S. (Amidoamine)
14.3. Transport hazard class(es)	
Class	8
Subsidiary risk	-
14.4. Packing group	III
14.5. Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-B
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
14.7. Maritime transport in bulk according to IMO instruments	Not established.

ADN; ADR; IATA; IMDG; RID



## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**

Not listed.

**Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

**UFI:**

Austria: N4D0-704G-R00H-3W8S  
Belgium: N4D0-704G-R00H-3W8S  
Bulgaria: N4D0-704G-R00H-3W8S  
Croatia: N4D0-704G-R00H-3W8S  
Cyprus: N4D0-704G-R00H-3W8S  
Czech Republic: N4D0-704G-R00H-3W8S  
Denmark: N4D0-704G-R00H-3W8S  
Estonia: N4D0-704G-R00H-3W8S  
EU: N4D0-704G-R00H-3W8S  
Finland: N4D0-704G-R00H-3W8S  
France: N4D0-704G-R00H-3W8S  
Germany: N4D0-704G-R00H-3W8S  
Greece: N4D0-704G-R00H-3W8S  
Hungary: N4D0-704G-R00H-3W8S  
Iceland: N4D0-704G-R00H-3W8S  
Ireland: N4D0-704G-R00H-3W8S  
Italy: N4D0-704G-R00H-3W8S  
Latvia: N4D0-704G-R00H-3W8S  
Lithuania: N4D0-704G-R00H-3W8S  
Luxembourg: N4D0-704G-R00H-3W8S  
Malta: N4D0-704G-R00H-3W8S  
Netherlands: N4D0-704G-R00H-3W8S  
Norway: N4D0-704G-R00H-3W8S  
Poland: N4D0-704G-R00H-3W8S  
Portugal: N4D0-704G-R00H-3W8S  
Romania: N4D0-704G-R00H-3W8S  
Slovakia: N4D0-704G-R00H-3W8S  
Slovenia: N4D0-704G-R00H-3W8S  
Spain: N4D0-704G-R00H-3W8S  
Sweden: N4D0-704G-R00H-3W8S

**Authorizations**

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

**Restrictions on use**

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use, as amended**  
**- Conditions of restriction given for the associated entry number should be considered**

Not listed.

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended**

Not listed.

**Other EU regulations**

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

ANNEX 1, PART 1 Categories of dangerous substances  
Hazard categories in accordance with Regulation (EC) No 1272/2008  
- E2 Hazardous to the Aquatic Environment Chronic

**Other regulations**

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

**National regulations**

Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended. Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

**France regulations**

**France INRS Table of Occupational Diseases**

Not regulated.

**Product registration number**

<b>Austria</b>	UFI: N4D0-704G-R00H-3W8S
<b>Belgium</b>	UFI: N4D0-704G-R00H-3W8S
<b>Czech Republic</b>	UFI: N4D0-704G-R00H-3W8S
<b>Denmark</b>	UFI: N4D0-704G-R00H-3W8S
<b>European Union</b>	UFI: N4D0-704G-R00H-3W8S
<b>Finland</b>	UFI: N4D0-704G-R00H-3W8S
<b>France</b>	UFI: N4D0-704G-R00H-3W8S
<b>Germany</b>	UFI: N4D0-704G-R00H-3W8S
<b>Greece</b>	UFI: N4D0-704G-R00H-3W8S
<b>Hungary</b>	UFI: N4D0-704G-R00H-3W8S
<b>Italy</b>	UFI: N4D0-704G-R00H-3W8S
<b>Netherlands</b>	UFI: N4D0-704G-R00H-3W8S

Norway	UFI: N4D0-704G-R00H-3W8S
Poland	UFI: N4D0-704G-R00H-3W8S
Portugal	UFI: N4D0-704G-R00H-3W8S
Slovakia	UFI: N4D0-704G-R00H-3W8S
Slovenia	UFI: N4D0-704G-R00H-3W8S
Spain	UFI: N4D0-704G-R00H-3W8S
Sweden	UFI: N4D0-704G-R00H-3W8S
Switzerland	UFI: N4D0-704G-R00H-3W8S

## 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

## SECTION 16: Other information

### List of abbreviations

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.  
 ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.  
 AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).  
 CAS: Chemical Abstract Service.  
 CEN: European Committee for Standardization.  
 IATA: International Air Transport Association.  
 IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.  
 IMDG: International Maritime Dangerous Goods.  
 MAC: Maximum Allowed Concentration.  
 MARPOL: International Convention for the Prevention of Pollution from Ships.  
 PBT: Persistent, bioaccumulative and toxic.  
 RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.  
 STEL: Short term exposure limit.  
 TLV: Threshold Limit Value.  
 TWA: Time Weighted Average.  
 VLE: Exposure Limit Value.  
 VME: Exposure Average Value.  
 vPvB: Very persistent and very bioaccumulative.

### References

Not available.

### Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

### Full text of any statements, which are not written out in full under sections 2 to 15

H302 Harmful if swallowed.  
 H312 Harmful in contact with skin.  
 H314 Causes severe skin burns and eye damage.  
 H317 May cause an allergic skin reaction.  
 H318 Causes serious eye damage.  
 H411 Toxic to aquatic life with long lasting effects.

### Revision information

Physical & Chemical Properties: Multiple Properties

### Training information

Follow training instructions when handling this material.

### Disclaimer

ITW Performance Polymers cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.

# SAFETY DATA SHEET

Version #: 20  
Issue date: 02-28-2013  
Revision date: 07-26-2023  
Supersedes date: 07-12-2023

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Trade name or designation of the mixture** Chockfast Red Resin

**Registration number** -

**Synonyms** None.

**SKU#** GP107R

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** Not available.

**Uses advised against** None known.

### 1.3. Details of the supplier of the safety data sheet

**Company Name** ITW Performance Polymers

**Address** Bay 150  
Shannon Industrial Estate  
Co. Clare  
Ireland  
V14 DF82

**Contact Person** Customer Service

**Telephone Number** 353(61)771500  
353(61)471285

**Email** customerservice.shannon@itwpp.com

**Emergency Phone Number** 44(0) 1235 239 670 (24 hours)

### 1.4. Emergency telephone number

**General in EU** 112 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

**Austria National Poisons Information Center** +431 406 4343 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

**Belgium National Poisons Control Center** 070 245 245 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

**Bulgaria National Toxicological Information Center** +359 2 9154 233 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

**Croatia Poisons Information Center** +385 1 2348 342 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)

**Cyprus Poison Center** 1401 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

**Czech Republic National Poisons Information Center** +420 224 919 293, or +420 224 915 402 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)

**Denmark National Poisons Control Center** +45 82 12 12 12 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

**Estonia National Poisons Information Center** 16662 or abroad: (+372) 626 9390 (Monday 9:00AM to Saturday 9:00AM (closed on Sundays and on national holidays). SDS/Product information may not be available for the Emergency Service.)

**Finland National Poison Information Center** (09) 471 977 (direct) or (09) 4711 (exchange) (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

**France National Poisons Control Center** ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

#### 1.4. Emergency telephone number

<b>Greece Poison Information Centre</b>	(0030) 2107793777 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Hungary National Emergency Phone Number</b>	+36-80-201-199 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Iceland Poison Center</b>	(+354) 543 2222 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Latvia Emergency medical aid</b>	113
<b>Latvia Poison and Drug Information Center</b>	+371 67042473 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Lithuania Neatidėliotina informacija apsinuodijus</b>	+370 5 236 20 52 or +37068753378 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)
<b>Malta Accident and Emergency Department</b>	2545 4030 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)
<b>Netherlands National Poisons Information Center (NVIC)</b>	NVIC: +31 (0)88 755 8000 (Only for the purpose of informing medical personnel in cases of acute intoxications)
<b>Norway Norwegian Poison Information Center</b>	22 59 13 00 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Portugal Poison Center</b>	800 250 250 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Romania Biroul RSI si Informare Toxicologica</b>	021.318.36.06 (Available 8:00AM-3:00PM. SDS/Product information may not be available for the Emergency Service.)
<b>Slovakia National Toxicological Information Center</b>	+421 2 5477 4166 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Spain Toxicology Information Service</b>	+ 34 91 562 04 20 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Sweden National Poison Information Center</b>	112 - and ask for Poison Information (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
<b>Switzerland Tox Info Suisse</b>	145 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

## SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

##### Classification according to Regulation (EC) No 1272/2008 as amended

##### Health hazards

Acute toxicity, dermal	Category 4	H312 - Harmful in contact with skin.
Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Serious eye damage/eye irritation	Category 2	
Skin sensitization	Category 1	H317 - May cause an allergic skin reaction.

##### Environmental hazards

Hazardous to the aquatic environment, long-term aquatic hazard	Category 3	H412 - Harmful to aquatic life with long lasting effects.
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#### 2.2. Label elements

**UFI:**

Austria: 61D0-Q0F3-F001-EJPQ  
 Belgium: 61D0-Q0F3-F001-EJPQ  
 Bulgaria: 61D0-Q0F3-F001-EJPQ  
 Croatia: 61D0-Q0F3-F001-EJPQ  
 Cyprus: 61D0-Q0F3-F001-EJPQ  
 Czech Republic: 61D0-Q0F3-F001-EJPQ  
 Denmark: 61D0-Q0F3-F001-EJPQ  
 Estonia: 61D0-Q0F3-F001-EJPQ  
 EU: 61D0-Q0F3-F001-EJPQ  
 Finland: 61D0-Q0F3-F001-EJPQ  
 France: 61D0-Q0F3-F001-EJPQ  
 Germany: 61D0-Q0F3-F001-EJPQ  
 Greece: 61D0-Q0F3-F001-EJPQ  
 Hungary: 61D0-Q0F3-F001-EJPQ  
 Iceland: 61D0-Q0F3-F001-EJPQ  
 Ireland: 61D0-Q0F3-F001-EJPQ  
 Italy: 61D0-Q0F3-F001-EJPQ  
 Latvia: 61D0-Q0F3-F001-EJPQ  
 Lithuania: 61D0-Q0F3-F001-EJPQ  
 Luxembourg: 61D0-Q0F3-F001-EJPQ  
 Malta: 61D0-Q0F3-F001-EJPQ  
 Netherlands: 61D0-Q0F3-F001-EJPQ  
 Norway: 61D0-Q0F3-F001-EJPQ  
 Poland: 61D0-Q0F3-F001-EJPQ  
 Portugal: 61D0-Q0F3-F001-EJPQ  
 Romania: 61D0-Q0F3-F001-EJPQ  
 Slovakia: 61D0-Q0F3-F001-EJPQ  
 Slovenia: 61D0-Q0F3-F001-EJPQ  
 Spain: 61D0-Q0F3-F001-EJPQ  
 Sweden: 61D0-Q0F3-F001-EJPQ

**Contains:**

Epoxy Resin: Reaction product of bisphenol A and epichlorohydrin (refer to epichlorohydrin), o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]

**Hazard pictograms**



**Signal word**

Warning

**Hazard statements**

H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H333	May be harmful if inhaled.
H412	Harmful to aquatic life with long lasting effects.

**Precautionary statements**

**Prevention**

P261	Avoid breathing mist/vapors.
P264	Wash thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear eye protection/face protection.
P280	Wear protective gloves/protective clothing.

**Response**

P302 + P352	IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.

**Storage**

Not available.

**Disposal**

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
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**Supplemental label information**

95% of the mixture consists of component(s) of unknown acute oral toxicity. 95% of the mixture consists of component(s) of unknown acute dermal toxicity. 99,5% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment.



## 2.3. Other hazards

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. The mixture does not contain any substances included in the list established in accordance with REACH Article 59(1) for having endocrine disrupting properties at a concentration equal to or greater than 0.1% by weight.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Epoxy Resin: Reaction product of bisphenol A and epichlorohydrin (refer to epichlorohydrin)	60 - 100	25068-38-6 -	01-2119456619-26-0000	-	
<b>Classification:</b> Skin Irrit. 2;H315, Eye Irrit. 2;H319, Skin Sens. 1;H317					
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	1 - 5	1330-20-7 215-535-7	-	601-022-00-9	#
<b>Classification:</b> Flam. Liq. 3;H226, Acute Tox. 4;H312;(ATE: 1100 mg/kg bw), Acute Tox. 4;H332;(ATE: 11 mg/l), Skin Irrit. 2;H315, Aquatic Chronic 2;H411					
ethylbenzene	< 1	100-41-4 202-849-4	-	601-023-00-4	#
<b>Classification:</b> Flam. Liq. 2;H225, Acute Tox. 4;H332;(ATE: 11 mg/l), Carc. 2;H351, STOT RE 2;H373, Asp. Tox. 1;H304, Aquatic Chronic 2;H411					

#### List of abbreviations and symbols that may be used above

ATE: Acute toxicity estimate.

M: M-factor

vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

#: This substance has been assigned Union workplace exposure limit(s).

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#### Composition comments

The full text for all H-statements is displayed in section 16.

## SECTION 4: First aid measures

#### General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

#### 4.1. Description of first aid measures

##### Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

##### Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical advice/attention if you feel unwell. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

##### Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

##### Ingestion

Rinse mouth. Get medical advice/attention if you feel unwell.

#### 4.2. Most important symptoms and effects, both acute and delayed

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

## SECTION 5: Firefighting measures

#### General fire hazards

Combustible liquid.

#### 5.1. Extinguishing media

##### Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

##### Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

#### 5.2. Special hazards arising from the substance or mixture

The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed.

#### 5.3. Advice for firefighters

##### Special protective equipment for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

##### Special fire fighting procedures

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****For non-emergency personnel**

Avoid breathing mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material.

**For emergency responders**

Keep unnecessary personnel away. Ensure adequate ventilation. Avoid breathing mist/vapors. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.

**6.2. Environmental precautions**

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

**6.3. Methods and material for containment and cleaning up**

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

**6.4. Reference to other sections**

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

Keep away from open flames, hot surfaces and sources of ignition. Avoid breathing mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

**7.2. Conditions for safe storage, including any incompatibilities**

Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

**7.3. Specific end use(s)**

Observe industrial sector guidance on best practices.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational exposure limits****Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001, as amended**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	Ceiling	880 mg/m <sup>3</sup>
		200 ppm
		440 mg/m <sup>3</sup>
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	MAK	100 ppm
		221 mg/m <sup>3</sup>
		50 ppm
	STEL	442 mg/m <sup>3</sup>
		100 ppm

**Belgium. OEL. Exposure Limit Values to Chemical Substances at Work, Code of Well-being at work, Book VI, Title 1 - Chemical agents, as amended**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	551 mg/m <sup>3</sup>
		125 ppm
	TWA	87 mg/m <sup>3</sup>
		20 ppm

**Belgium. OEL. Exposure Limit Values to Chemical Substances at Work, Code of Well-being at work, Book VI, Title 1 - Chemical agents, as amended**

Components	Type	Value
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

**Bulgaria. OELs. Ordinance No 13 on protection of workers against risks of exposure to chemical agents at work, as amended**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	545 mg/m3
	TWA	435 mg/m3
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

**Croatia. OELs (GVI). Regulation on Protection of Workers against Exposure to Dangerous Chemicals at Work, OELs and Biological Limit Values, Annex I (NN 91/2018), as amended**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	MAC	442 mg/m3
		100 ppm
	STEL	884 mg/m3
		200 ppm
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	MAC	221 mg/m3
		50 ppm
	STEL	442 mg/m3
		100 ppm

**Cyprus. OELs. Occupational Exposure Limit Values of Chemicals at Work (Safety and Health at Work (Chem. Agents) Reg., Ann. 1, R.A.A. 268/2001, as amended)**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

**Czech Republic. Occupational exposure limit values of chemicals at work (Decree on protection of health at work, 361/2007, Annex 2, Part A & Annex 3, Part A, as amended)**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	Ceiling	500 mg/m3
	TWA	200 mg/m3

**Czech Republic. Occupational exposure limit values of chemicals at work (Decree on protection of health at work, 361/2007, Annex 2, Part A & Annex 3, Part A, as amended)**

Components	Type	Value
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	Ceiling	400 mg/m3
	TWA	200 mg/m3

**Denmark. Work Environment Authority. Exposure Limits for Substances & Materials, Annex 2**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	TLV	217 mg/m3
		50 ppm
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	TLV	109 mg/m3
		25 ppm

**Estonia. OELs. Occupational Exposure Limits of Hazardous Substances (Regulation No. 105/2001, Annex), as amended**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)		100 ppm
	STEL	450 mg/m3
		100 ppm
	TWA	200 mg/m3
		50 ppm

**Finland. HTP-arvot, App 3., Binding Limit Values, Social Affairs and Ministry of Health**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	880 mg/m3
		200 ppm
	TWA	220 mg/m3
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)		50 ppm
	STEL	440 mg/m3
		100 ppm
	TWA	220 mg/m3
		50 ppm

**France. OELs. Occupational Exposure Limits as Prescribed by Art. R.4412-149 of Labor Code, as amended**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	VLE	442 mg/m3
		100 ppm
	VME	88,4 mg/m3
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)		20 ppm
	VLE	442 mg/m3
		100 ppm
	VME	221 mg/m3
		50 ppm

**France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	VLE	442 mg/m3
<b>Regulatory status:</b> Regulatory binding (VRC)		100 ppm
<b>Regulatory status:</b> Regulatory binding (VRC)	VME	88,4 mg/m3
<b>Regulatory status:</b> Regulatory binding (VRC)		20 ppm
<b>Regulatory status:</b> Regulatory binding (VRC)	VLE	442 mg/m3
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)		100 ppm
<b>Regulatory status:</b> Regulatory binding (VRC)		221 mg/m3
<b>Regulatory status:</b> Regulatory binding (VRC)	VME	50 ppm
<b>Regulatory status:</b> Regulatory binding (VRC)		

**Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG), as updated**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	TWA	88 mg/m3
		20 ppm
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	TWA	220 mg/m3
		50 ppm

**Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	AGW	88 mg/m3
		20 ppm
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	AGW	220 mg/m3
		50 ppm

**Greece. OELs, Presidential Decree No. 307/1986, as amended**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	545 mg/m3
		125 ppm
	TWA	435 mg/m3
		100 ppm
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	STEL	650 mg/m3
		150 ppm
	TWA	435 mg/m3
		100 ppm

**Hungary. OELs. Decree on protection of workers exposed to chemical agents (5/2020. (II.6)), Annex 1&2, as amended**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3

**Hungary. OELs. Decree on protection of workers exposed to chemical agents (5/2020. (II.6)), Annex 1&2, as amended**

Components	Type	Value
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	TWA	442 mg/m3
	STEL	442 mg/m3
	TWA	221 mg/m3

**Iceland. OELs. Regulation 390/2009 on Pollution Limits and Measures to Reduce Pollution at the Workplace, as amended**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	200 mg/m3
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)		50 ppm
	STEL	442 mg/m3
		100 ppm
	TWA	109 mg/m3
		25 ppm

**Ireland. OELVs, Schedules 1 & 2, Code of Practice for Chemical Agents and Carcinogens Regulations**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)		100 ppm
	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

**Italy. OELs (Legislative Decree n.81, 9 April 2008), as amended**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)		100 ppm
	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

**Latvia. OELs. Occupational Exposure Limits of Chemical Substances at Workplace (Reg. No. 325/ 2007, L.V. 80, Annex 1), as amended**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm

**Latvia. OELs. Occupational Exposure Limits of Chemical Substances at Workplace (Reg. No. 325/ 2007, L.V. 80, Annex 1), as amended**

Components	Type	Value
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

**Lithuania. OELs. Occupational Exposure Limit Values for Chemical Substances (Hygiene Norm HN 23:2011; Order No. V-824/A1-389), as amended**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

**Luxembourg. OELs. Binding Occupational Exposure Limit Values (Annex I), G.D.R. of 14 November 2016, OJ Memorial A, n ° 235/2016, as amended**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

**Malta. OELs. Protection of Health and Safety of Workers from Risks related to Chemical Agents at Work (L.N 227/2003 Schedules I and V), as amended**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

**Netherlands. OELs per Annex XIII of Working Conditions Regulation (Staatscourant no. 252, 29 December 2006), as amended**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	430 mg/m3

**Netherlands. OELs per Annex XIII of Working Conditions Regulation (Staatscourant no. 252, 29 December 2006), as amended**

Components	Type	Value
	TWA	215 mg/m3
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	STEL	442 mg/m3
	TWA	210 mg/m3

**Norway. Regulation No. 1358 on Measures and Limit Values for Physical and Chemical Factors in Work Environment and Infection Groups for Biological Factors, as amended**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	TLV	20 mg/m3
		5 ppm
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	TLV	108 mg/m3
		25 ppm

**Poland. Maximum permissible concentrations and intensities of harmful factors in the work environment (Dz.U.Poz. 1286/2018, Annex 1)**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	400 mg/m3
	TWA	200 mg/m3
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	STEL	200 mg/m3
	TWA	100 mg/m3

**Portugal. Decree-Law No. 24/2012, Occupational Exposure Limit Values, Annex II, as amended**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

**Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796-2014)**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	TWA	20 ppm
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm

**Romania. OELs. Limit Values of Chemical Agents at Workplace (Regulation 1.218/2006, M.O 845, Annex 1, 3&4, as amended)**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm



**Romania. OELs. Limit Values of Chemical Agents at Workplace (Regulation 1.218/2006, M.O 845, Annex 1, 3&4, as amended)**

Components	Type	Value
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

**Slovakia. OELs. Maximum permissible exposure limits for chemical factors in workplace air (Regulation No 355/2006, Annex 1, Table 1, as amended)**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

**Slovenia. OELs. Occupational Exposure Limits of Chemicals at Workplace (Reg. on Protection of Workers from Risks due to Exp. to Chemicals at Work, Annex I), as amended**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	TWA	442 mg/m3
		100 ppm
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	TWA	221 mg/m3
		50 ppm

**Spain. OELs. INSST, Límites de Exposición Profesional Para Agentes Químicos, Table 1-Valores Límites Ambientales (VLAs)**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	441 mg/m3
		100 ppm
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

**Sweden. OELs (Annex 1). Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2018:1), as amended**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	Ceiling	884 mg/m3
		200 ppm
	TWA	220 mg/m3
		50 ppm

**Sweden. OELs (Annex 1). Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2018:1), as amended**

Components	Type	Value
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	Ceiling	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

**Switzerland. SUVA Grenzwerte am Arbeitsplatz: Aktuelle MAK-Werte**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	220 mg/m3
		50 ppm
	TWA	220 mg/m3
		50 ppm
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	STEL	870 mg/m3
		200 ppm
	TWA	435 mg/m3
		100 ppm

**UK. OELs. Workplace Exposure Limits (WELs) (EH40/2005 (Fourth Edition 2020)), Table 1**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	552 mg/m3
		125 ppm
	TWA	441 mg/m3
		100 ppm
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	STEL	441 mg/m3
		100 ppm
	TWA	220 mg/m3
		50 ppm

**EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU**

Components	Type	Value
ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

**Biological limit values**

**Croatia. BELs (BGV). Regulation on Protection of Workers against Exposure to Dangerous Chemicals at Work, OELs and BELs, Annex IV (NN 91/2018), as amended**

Components	Value	Determinant	Specimen	Sampling Time
ethylbenzene (CAS 100-41-4)	1,5 g/g	Mandelic acid	Creatinine in urine	*
	1,5 mg/l	ethylbenzene	Blood	*

**Croatia. BELs (BGV). Regulation on Protection of Workers against Exposure to Dangerous Chemicals at Work, OELs and BELs, Annex IV (NN 91/2018), as amended**

Components	Value	Determinant	Specimen	Sampling Time
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	1,12 mol/mol	Mandelic acid	Creatinine in urine	*
	14,1 umol/l	ethylbenzene	Blood	*
	1,5 g/g	Methylhippuric acids	Creatinine in urine	*
	1,5 mg/l	xylene	Blood	*
	0,88 mol/mol	Methylhippuric acids	Creatinine in urine	*
	14,13 umol/l	xylene	Blood	*

\* - For sampling details, please see the source document.

**Czech Republic. BELs. Government Decree 432/2003 Sb., as amended**

Components	Value	Determinant	Specimen	Sampling Time
ethylbenzene (CAS 100-41-4)	1100 µmol/mmol	Mandelic acid	Creatinine in urine	*
	1500 mg/g	Mandelic acid	Creatinine in urine	*
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	820 µmol/mmol	Methylhippuric acids	Creatinine in urine	*
	1400 mg/g	Methylhippuric acids	Creatinine in urine	*

\* - For sampling details, please see the source document.

**Finland. HTP-arvot, App 2., Biological Limit Values, Social Affairs and Ministry of Health**

Components	Value	Determinant	Specimen	Sampling Time
ethylbenzene (CAS 100-41-4)	5,2 mmol/l	Mandelic acid	Urine	*
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	5 mmol/l	Methylhippuric acids	Urine	*

\* - For sampling details, please see the source document.

**France. Biological indicators of exposure (IBE) (National Institute for Research and Security (INRS), ND 2065)**

Components	Value	Determinant	Specimen	Sampling Time
ethylbenzene (CAS 100-41-4)	1500 mg/g	Acide mandélique	Creatinine in urine	*
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	1500 mg/g	Acides méthylhippuriques	Creatinine in urine	*

\* - For sampling details, please see the source document.

**Germany. TRGS 903, BAT List (Biological Limit Values)**

Components	Value	Determinant	Specimen	Sampling Time
ethylbenzene (CAS 100-41-4)	250 mg/g	Mandelsäure plus Phenylglyoxylsäure	Creatinine in urine	*
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	2000 mg/l	Methylhippur-(Tolur-) säure (alle Isomere)	Urine	*

\* - For sampling details, please see the source document.

**Hungary. BELs. Decree on protection of workers exposed to chemical agents (5/2020. (II.6)), Annex 3&4, as amended**

Components	Value	Determinant	Specimen	Sampling Time
ethylbenzene (CAS 100-41-4)	1110 µmol/mmol	mandelic acid	Creatinine in urine	*
	1500 mg/g	mandelic acid	Creatinine in urine	*

**Hungary. BELs. Decree on protection of workers exposed to chemical agents (5/2020. (II.6)), Annex 3&4, as amended**

Components	Value	Determinant	Specimen	Sampling Time
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	860 µmol/mmol	methyl hippuric acids	Creatinine in urine	*
	1500 mg/g	methyl hippuric acids	Creatinine in urine	*

\* - For sampling details, please see the source document.

**Slovakia. BLVs (Biological Limit Value). Regulation no. 355/2006 concerning protection of workers exposed to chemical agents, Annex 2**

Components	Value	Determinant	Specimen	Sampling Time
ethylbenzene (CAS 100-41-4)	8,03 mg/g	2 and 4-ethylphenol	Creatinine in urine	*
	12 mg/l	2 and 4-ethylphenol	Urine	*
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	1334 mg/g	Methylhippuric acids	Creatinine in urine	*
	2000 mg/l	Methylhippuric acids	Urine	*
	1,5 mg/l	xylene	Blood	*

\* - For sampling details, please see the source document.

**Spain. BELs. INSST, Límites de Exposición Profesional Para Agentes Químicos, Table 3-Valores Límite Biológicos (VLB)**

Components	Value	Determinant	Specimen	Sampling Time
ethylbenzene (CAS 100-41-4)	700 mg/g	Suma del ácido mandélico y el ácido fenilglicólico	Creatinine in urine	*
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	1 g/g	Ácidos metilhipúricos	Creatinine in urine	*

\* - For sampling details, please see the source document.

**Switzerland. SUVA Grenzwerte am Arbeitsplatz: Aktuelle BAT-Werte**

Components	Value	Determinant	Specimen	Sampling Time
ethylbenzene (CAS 100-41-4)	600 mg/g	Mandelsäure + Phenylglyoxylsäure	Creatinine in urine	*
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	2 g/l	Methylhippursäuren	Urine	*

\* - For sampling details, please see the source document.

**UK. BELs. Biological Monitoring Guidance Values (BMGVs) (EH40/2005 (Fourth Edition 2020)), Table 2**

Components	Value	Determinant	Specimen	Sampling Time
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	650 mmol/mol	Methyl hippuric acid	Creatinine in urine	*

\* - For sampling details, please see the source document.

**Recommended monitoring procedures** Follow standard monitoring procedures.

**Derived no effect levels (DNELs)** Not available.

**Predicted no effect concentrations (PNECs)** Not available.

**Exposure guidelines**

**Austria MAK: Skin designation**

ethylbenzene (CAS 100-41-4) Can be absorbed through the skin.  
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7) Can be absorbed through the skin.

**Belgium OELs: Skin designation**

ethylbenzene (CAS 100-41-4) Can be absorbed through the skin.

o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	Can be absorbed through the skin.
<b>Bulgaria OELs: Skin designation</b>	
ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	Can be absorbed through the skin.
<b>Croatia ELVs: Skin designation</b>	
ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	Can be absorbed through the skin.
<b>Czech Republic PELs: Skin designation</b>	
ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	Can be absorbed through the skin.
<b>Denmark GV: Skin designation</b>	
ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	Can be absorbed through the skin.
<b>Estonia OELs: Skin designation</b>	
ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	Can be absorbed through the skin.
<b>EU Exposure Limit Values: Skin designation</b>	
ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	Can be absorbed through the skin.
<b>Finland Exposure Limit Values: Skin designation</b>	
ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	Can be absorbed through the skin.
<b>France INRS: Skin designation</b>	
ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	Can be absorbed through the skin.
<b>France Mandatory OELs (VLEP): Skin designation</b>	
ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	Can be absorbed through the skin.
<b>Germany DFG MAK (advisory): Skin designation</b>	
ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	Can be absorbed through the skin.
<b>Germany TRGS 900 Limit Values: Skin designation</b>	
ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	Can be absorbed through the skin.
<b>Greece OEL: Skin designation</b>	
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	Can be absorbed through the skin.
<b>Hungary OELs: Skin designation</b>	
ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	Can be absorbed through the skin.
<b>Iceland OELs: Skin designation</b>	
ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	Can be absorbed through the skin.
<b>Ireland Exposure Limit Values: Skin designation</b>	
ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	Can be absorbed through the skin.
<b>Italy OELs: Skin designation</b>	
ethylbenzene (CAS 100-41-4)	Danger of cutaneous absorption
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	Danger of cutaneous absorption
<b>Latvia OELs: Skin designation</b>	
ethylbenzene (CAS 100-41-4)	Can be absorbed through the skin.

o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]  
(CAS 1330-20-7)

Can be absorbed through the skin.

#### **Lithuania OELs: Skin designation**

ethylbenzene (CAS 100-41-4)  
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]  
(CAS 1330-20-7)

Can be absorbed through the skin.  
Can be absorbed through the skin.

#### **Luxembourg OELs: Skin designation**

ethylbenzene (CAS 100-41-4)  
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]  
(CAS 1330-20-7)

Can be absorbed through the skin.  
Can be absorbed through the skin.

#### **Malta OELs: Skin designation**

ethylbenzene (CAS 100-41-4)  
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]  
(CAS 1330-20-7)

Can be absorbed through the skin.  
Can be absorbed through the skin.

#### **Netherlands OELs (binding): Skin designation**

ethylbenzene (CAS 100-41-4)  
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]  
(CAS 1330-20-7)

Can be absorbed through the skin.  
Can be absorbed through the skin.

#### **Norway Exposure Limit Values: Skin designation**

ethylbenzene (CAS 100-41-4)  
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]  
(CAS 1330-20-7)

Can be absorbed through the skin.  
Can be absorbed through the skin.

#### **Portugal OELs: Skin designation**

ethylbenzene (CAS 100-41-4)  
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]  
(CAS 1330-20-7)

Can be absorbed through the skin.  
Can be absorbed through the skin.

#### **Romania OELs: Skin designation**

ethylbenzene (CAS 100-41-4)  
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]  
(CAS 1330-20-7)

Can be absorbed through the skin.  
Can be absorbed through the skin.

#### **Slovakia OELs: Skin designation**

ethylbenzene (CAS 100-41-4)  
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]  
(CAS 1330-20-7)

Can be absorbed through the skin.  
Can be absorbed through the skin.

#### **Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)**

ethylbenzene (CAS 100-41-4)  
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]  
(CAS 1330-20-7)

Can be absorbed through the skin.  
Can be absorbed through the skin.

#### **Spain OELs: Skin designation**

ethylbenzene (CAS 100-41-4)  
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]  
(CAS 1330-20-7)

Can be absorbed through the skin.  
Can be absorbed through the skin.

#### **Sweden Threshold Limit Values: Skin designation**

ethylbenzene (CAS 100-41-4)  
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]  
(CAS 1330-20-7)

Can be absorbed through the skin.  
Can be absorbed through the skin.

#### **Switzerland SUVA Limit Values at the Workplace: Skin designation**

ethylbenzene (CAS 100-41-4)  
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]  
(CAS 1330-20-7)

Can be absorbed through the skin.  
Can be absorbed through the skin.

#### **UK EH40 WEL: Skin designation**

ethylbenzene (CAS 100-41-4)  
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]  
(CAS 1330-20-7)

Can be absorbed through the skin.  
Can be absorbed through the skin.

## **8.2. Exposure controls**

### **Appropriate engineering controls**

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.

### **Individual protection measures, such as personal protective equipment**

#### **General information**

Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

#### **Eye/face protection**

Wear safety glasses with side shields (or goggles). Face shield is recommended.

<b>Skin protection</b>	
- Hand protection	Wear appropriate chemical resistant gloves.
- Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
<b>Respiratory protection</b>	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>Hygiene measures</b>	When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.
<b>Environmental exposure controls</b>	Inform appropriate managerial or supervisory personnel of all environmental releases. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Colorless to light yellow.
<b>Odor</b>	Aromatic. Hydrocarbon-like.
<b>Melting point/freezing point</b>	Not available.
<b>Boiling point or initial boiling point and boiling range</b>	280,4 °F (138 °C)
<b>Flammability</b>	Not applicable.
<b>Flash point</b>	150,0 °F (65,6 °C) Pensky-Martens Closed Cup
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>pH</b>	7
<b>Kinematic viscosity</b>	Not available.
<b>Solubility</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water) (log value)</b>	Not available.
<b>Vapor pressure</b>	5,6 hPa estimated
<b>Density and/or relative density</b>	Not available.
<b>Vapor density</b>	3,5
<b>Particle characteristics</b>	Not available.

### 9.2. Other information

**9.2.1. Information with regard to physical hazard classes** No relevant additional information available.

#### 9.2.2. Other safety characteristics

<b>Evaporation rate</b>	0,6
<b>Specific gravity</b>	1,2
<b>VOC</b>	52 g/l

## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>10.2. Chemical stability</b>	Material is stable under normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>10.4. Conditions to avoid</b>	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>10.5. Incompatible materials</b>	Strong oxidizing agents.
<b>10.6. Hazardous decomposition products</b>	Carbon oxides.

## SECTION 11: Toxicological information

<b>General information</b>	Occupational exposure to the substance or mixture may cause adverse effects.
<b>Information on likely routes of exposure</b>	
<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
<b>Symptoms</b>	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

<b>Acute toxicity</b>	Harmful in contact with skin.	
<b>Components</b>	<b>Species</b>	<b>Test Results</b>
ethylbenzene (CAS 100-41-4)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	17800 mg/kg
<b>Oral</b>		
LD50	Rat	3500 mg/kg
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	3523 - 8600 mg/kg
<b>Skin corrosion/irritation</b>	Causes skin irritation.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.	
<b>Respiratory sensitization</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Skin sensitization</b>	May cause an allergic skin reaction.	
<b>Germ cell mutagenicity</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Carcinogenicity</b>	Due to partial or complete lack of data the classification is not possible.	
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
ethylbenzene (CAS 100-41-4)		2B Possibly carcinogenic to humans.
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)		3 Not classifiable as to carcinogenicity to humans.
<b>Reproductive toxicity</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Specific target organ toxicity - single exposure</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Specific target organ toxicity - repeated exposure</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Aspiration hazard</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Mixture versus substance information</b>	No information available.	

### 11.2. Information on other hazards

<b>Endocrine disrupting properties</b>	This mixture does not contain any substances having endocrine disrupting properties with respect to human health as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.
<b>Other information</b>	Not available.

## SECTION 12: Ecological information

<b>12.1. Toxicity</b>	Harmful to aquatic life with long lasting effects. Due to partial or complete lack of data the classification for hazardous to the aquatic environment, acute hazard, is not possible.
<b>12.2. Persistence and degradability</b>	No data is available on the degradability of any ingredients in the mixture.
<b>12.3. Bioaccumulative potential</b>	



**Partition coefficient  
n-octanol/water (log Kow)**

ethylbenzene	3,15
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	3,12 - 3,2

**Bioconcentration factor (BCF)** Not available.

**12.4. Mobility in soil** No data available.

**12.5. Results of PBT and vPvB assessment** This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

**12.6. Endocrine disrupting properties** This mixture does not contain any substances having endocrine disrupting properties with respect to the environment as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.

**12.7. Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

**12.8. Additional information**

**Estonia Dangerous substances in soil Data**

ethylbenzene (CAS 100-41-4)	ETHYLBENZENE 0,1 MG/KG ETHYLBENZENE 5 MG/KG ETHYLBENZENE 50 MG/KG
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	Chemical pesticides (As the total sum of the active substances) 0,5 MG/KG Chemical pesticides (As the total sum of the active substances) 20 MG/KG Chemical pesticides (As the total sum of the active substances) 5 MG/KG

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

<b>Residual waste</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
<b>EU waste code</b>	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Disposal methods/information</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Special precautions</b>	Dispose in accordance with all applicable regulations.

**SECTION 14: Transport information**

**ADR**

<b>14.1. UN number</b>	UN3082
<b>14.2. UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin)
<b>14.3. Transport hazard class(es)</b>	
Class	9
Subsidiary risk	-
Label(s)	9
Hazard No. (ADR)	90
Tunnel restriction code	E
<b>14.4. Packing group</b>	III
<b>14.5. Environmental hazards</b>	No.
<b>14.6. Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

**RID**

<b>14.1. UN number</b>	UN3082
<b>14.2. UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin)
<b>14.3. Transport hazard class(es)</b>	
Class	9
Subsidiary risk	-
Label(s)	9

14.4. Packing group	III
14.5. Environmental hazards	No.
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

#### ADN

14.1. UN number	UN3082
14.2. UN proper shipping name	Environmentally Hazardous Liquid, N.o.s. (Epoxy Resin)
14.3. Transport hazard class(es)	
Class	9
Subsidiary risk	-
Label(s)	9
14.4. Packing group	III
14.5. Environmental hazards	No.
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

#### IATA

14.1. UN number	UN3082
14.2. UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (Epoxy Resin)
14.3. Transport hazard class(es)	
Class	9
Subsidiary risk	-
14.4. Packing group	III
14.5. Environmental hazards	Yes
ERG Code	9L
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

#### Other information

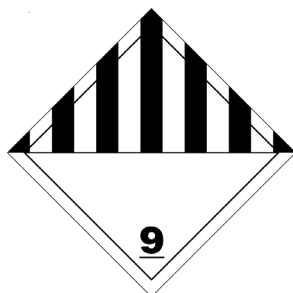
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

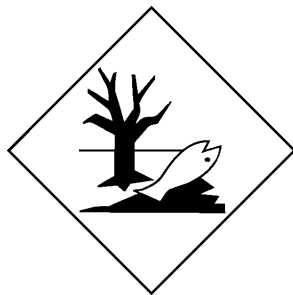
#### IMDG

14.1. UN number	UN3082
14.2. UN proper shipping name	Environmentally hazardous substances, liquid, n.o.s. (Epoxy Resin), MARINE POLLUTANT
14.3. Transport hazard class(es)	
Class	9
Subsidiary risk	-
Label(s)	9
14.4. Packing group	III
14.5. Environmental hazards	
Marine pollutant	Yes
EmS	Not assigned.
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

14.7. Maritime transport in bulk according to IMO instruments	Not established.
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ADN; ADR; IATA; IMDG; RID





General information

IMDG Regulated Marine Pollutant.

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**

Not listed.

**Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**

ethylbenzene (CAS 100-41-4)

o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

#### UFI:

Austria: 61D0-Q0F3-F001-EJPQ  
Belgium: 61D0-Q0F3-F001-EJPQ  
Bulgaria: 61D0-Q0F3-F001-EJPQ  
Croatia: 61D0-Q0F3-F001-EJPQ  
Cyprus: 61D0-Q0F3-F001-EJPQ  
Czech Republic: 61D0-Q0F3-F001-EJPQ  
Denmark: 61D0-Q0F3-F001-EJPQ  
Estonia: 61D0-Q0F3-F001-EJPQ  
EU: 61D0-Q0F3-F001-EJPQ  
Finland: 61D0-Q0F3-F001-EJPQ  
France: 61D0-Q0F3-F001-EJPQ  
Germany: 61D0-Q0F3-F001-EJPQ  
Greece: 61D0-Q0F3-F001-EJPQ  
Hungary: 61D0-Q0F3-F001-EJPQ  
Iceland: 61D0-Q0F3-F001-EJPQ  
Ireland: 61D0-Q0F3-F001-EJPQ  
Italy: 61D0-Q0F3-F001-EJPQ  
Latvia: 61D0-Q0F3-F001-EJPQ  
Lithuania: 61D0-Q0F3-F001-EJPQ  
Luxembourg: 61D0-Q0F3-F001-EJPQ  
Malta: 61D0-Q0F3-F001-EJPQ  
Netherlands: 61D0-Q0F3-F001-EJPQ  
Norway: 61D0-Q0F3-F001-EJPQ  
Poland: 61D0-Q0F3-F001-EJPQ  
Portugal: 61D0-Q0F3-F001-EJPQ  
Romania: 61D0-Q0F3-F001-EJPQ  
Slovakia: 61D0-Q0F3-F001-EJPQ  
Slovenia: 61D0-Q0F3-F001-EJPQ  
Spain: 61D0-Q0F3-F001-EJPQ  
Sweden: 61D0-Q0F3-F001-EJPQ

#### Authorizations

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

## Restrictions on use

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use, as amended**  
- Conditions of restriction given for the associated entry number should be considered

ethylbenzene (CAS 100-41-4)	40
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4] (CAS 1330-20-7)	75

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended**

Not listed.

## Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

## National regulations

Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended. Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

## France regulations

### France INRS Table of Occupational Diseases

Epoxy Resin: Reaction product of bisphenol A and epichlorohydrin (refer to epichlorohydrin)  
(CAS 25068-38-6)  
ethylbenzene (CAS 100-41-4)

Maladies professionnelles provoquées par les résines époxydiques et leurs constituants 51

Affections engendrées par les solvants organiques liquides à usage professionnel : hydrocarbures liquides aliphatiques ou cycliques saturés ou insaturés et leurs mélanges; hydrocarbures halogénés liquides; dérivés nitrés des hydrocarbures aliphatiques; al 84

## Product registration number

<b>Austria</b>	UFI: 61D0-Q0F3-F001-EJPQ
<b>Belgium</b>	UFI: 61D0-Q0F3-F001-EJPQ
<b>Czech Republic</b>	UFI: 61D0-Q0F3-F001-EJPQ
<b>Denmark</b>	UFI: 61D0-Q0F3-F001-EJPQ
<b>European Union</b>	UFI: 61D0-Q0F3-F001-EJPQ
<b>Finland</b>	UFI: 61D0-Q0F3-F001-EJPQ
<b>France</b>	UFI: 61D0-Q0F3-F001-EJPQ
<b>Germany</b>	UFI: 61D0-Q0F3-F001-EJPQ
<b>Greece</b>	UFI: 61D0-Q0F3-F001-EJPQ
<b>Hungary</b>	UFI: 61D0-Q0F3-F001-EJPQ
<b>Italy</b>	UFI: 61D0-Q0F3-F001-EJPQ
<b>Netherlands</b>	UFI: 61D0-Q0F3-F001-EJPQ
<b>Norway</b>	UFI: 61D0-Q0F3-F001-EJPQ
<b>Poland</b>	UFI: 61D0-Q0F3-F001-EJPQ
<b>Portugal</b>	UFI: 61D0-Q0F3-F001-EJPQ
<b>Slovakia</b>	UFI: 61D0-Q0F3-F001-EJPQ
<b>Slovenia</b>	UFI: 61D0-Q0F3-F001-EJPQ
<b>Spain</b>	UFI: 61D0-Q0F3-F001-EJPQ
<b>Sweden</b>	UFI: 61D0-Q0F3-F001-EJPQ
<b>Switzerland</b>	UFI: 61D0-Q0F3-F001-EJPQ

## 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

## SECTION 16: Other information

### List of abbreviations

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.  
ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.  
AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).  
CAS: Chemical Abstract Service.  
CEN: European Committee for Standardization.  
IATA: International Air Transport Association.  
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.  
IMDG: International Maritime Dangerous Goods.  
MAC: Maximum Allowed Concentration.  
MARPOL: International Convention for the Prevention of Pollution from Ships.  
PBT: Persistent, bioaccumulative and toxic.  
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.  
STEL: Short term exposure limit.

TLV: Threshold Limit Value.  
TWA: Time Weighted Average.  
VLE: Exposure Limit Value.  
VME: Exposure Average Value.  
vPvB: Very persistent and very bioaccumulative.

Not available.

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

## References

### Information on evaluation method leading to the classification of mixture

### Full text of any statements, which are not written out in full under sections 2 to 15

H225 Highly flammable liquid and vapor.  
H226 Flammable liquid and vapor.  
H304 May be fatal if swallowed and enters airways.  
H312 Harmful in contact with skin.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H351 Suspected of causing cancer.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H411 Toxic to aquatic life with long lasting effects.

## Revision information

## Training information

## Disclaimer

Physical & Chemical Properties: Multiple Properties

Follow training instructions when handling this material.

ITW Performance Polymers cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.