SAFETY DATA SHEET

Version # 12

Issue date: 06-24-2013 Revision date: 07-27-2023 Supersedes date: 07-16-2023

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

1.1. Product identifier

Trade name or designation

of the mixture

PhillyBond Orange Hardener

Registration number

None. Synonyms DM014H SKU#

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

ITW Performance Polymers Company Name

Address Bay 150

Shannon Industrial Estate

Co. Clare Ireland V14 DF82

Contact Person Customer Service Telephone Number 353(61)771500

353(61)471285

customerservice.shannon@itwpp.com **Fmail**

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

Control 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

+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.)

Material name: PhillyBond Orange Hardener

1.4. Emergency telephone number

Greece Poison Information Centre

(0030) 2107793777 (Available 24 hours a day. SDS/Product information may not

be available for the Emergency Service.)

Hungary National Emergency Phone Number +36-80-201-199 (Available 24 hours a day. SDS/Product information may not be

available for the Emergency Service.)

Iceland Poison Center

(+354) 543 2222 (Available 24 hours a day. SDS/Product information may not be

available for the Emergency Service.)

Latvia Emergency medical

aid

113

Latvia Poison and Drug Information Center

+371 67042473 (Available 24 hours a day. SDS/Product information may not be

available for the Emergency Service.)

Lithuania Neatidėliotina informacija apsinuodijus +370 5 236 20 52 or +37068753378 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)

Malta Accident and Emergency Department 2545 4030 (Hours of operation not provided. SDS/Product information may not be

available for the Emergency Service.)

Netherlands National Poisons Information Center (NVIC) NVIC: +31 (0)88 755 8000 (Only for the purpose of informing medical personnel in cases of acute intoxications)

in cases of acute intoxications)

Norway Norwegian Poison Information Center

22 59 13 00 (Available 24 hours a day. SDS/Product information may not be

available for the Emergency Service.)

Portugal Poison Center 800 250 250 (Available 24 hours a day. SDS/Product information may not be

available for the Emergency Service.)

Romania Biroul RSI si Informare Toxicologica 021.318.36.06 (Available 8:00AM-3:00PM. SDS/Product information may not be

available for the Emergency Service.)

Slovakia National Toxicological Information Center +421 2 5477 4166 (Available 24 hours a day. SDS/Product information may not

be available for the Emergency Service.)

Spain Toxicology Information Service

+ 34 91 562 04 20 (Available 24 hours a day. SDS/Product information may not

be available for the Emergency Service.)

Sweden National Poison Information Center

112 - and ask for Poison Information (Available 24 hours a day. SDS/Product

information may not be available for the Emergency Service.)

Switzerland Tox Info Suisse

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 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.

Reproductive toxicity (fertility, the unborn Category 2 H361fd - Suspected of damaging

fertility. Suspected of damaging the

H400 - Very toxic to aquatic life.

unborn child.

Environmental hazards

Hazardous to the aquatic environment, acute Category 1 aquatic hazard

Hazardous to the aquatic environment, Category 2 H411 - Toxic to aquatic life with

long-term aguatic hazard long lasting effects.

2.2. Label elements

child)

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

UFI:

Austria: NYD0-901F-T00G-QA3E Belgium: NYD0-901F-T00G-QA3E Bulgaria: NYD0-901F-T00G-QA3E Croatia: NYD0-901F-T00G-QA3E Cyprus: NYD0-901F-T00G-QA3E

Czech Republic: NYD0-901F-T00G-QA3E
Denmark: NYD0-901F-T00G-QA3E
Estonia: NYD0-901F-T00G-QA3E
EU: NYD0-901F-T00G-QA3E
Finland: NYD0-901F-T00G-QA3E
France: NYD0-901F-T00G-QA3E
Germany: NYD0-901F-T00G-QA3E
Greece: NYD0-901F-T00G-QA3E
Hungary: NYD0-901F-T00G-QA3E
Iceland: NYD0-901F-T00G-QA3E
Ireland: NYD0-901F-T00G-QA3E

Italy: NYD0-901F-T00G-QA3E
Latvia: NYD0-901F-T00G-QA3E
Lithuania: NYD0-901F-T00G-QA3E
Luxembourg: NYD0-901F-T00G-QA3E
Malta: NYD0-901F-T00G-QA3E
Netherlands: NYD0-901F-T00G-QA3E
Norway: NYD0-901F-T00G-QA3E
Poland: NYD0-901F-T00G-QA3E
Portugal: NYD0-901F-T00G-QA3E
Romania: NYD0-901F-T00G-QA3E
Slovakia: NYD0-901F-T00G-QA3E
Slovenia: NYD0-901F-T00G-QA3E

Spain: NYD0-901F-T00G-QA3E

Sweden: NYD0-901F-T00G-QA3E

Contains: 1,3-Benzenedimethanamine, 4-tert-butylphenol, benzyl alcohol, Formaldehyde, Polymer With

Benzenamine, Hydrogenated, nonylphenol; [1] 4-nonylphenol, branched [2], nonylphenol; [1]

4-nonylphenol, branched [2], TRIMETHYLHEXAMETHYLENEDIAMINE

Hazard pictograms



Signal word Danger

Hazard statements

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.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

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 vapor.

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 protective gloves/protective clothing/eye protection/face protection/hearing protection.

Response

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.

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

Store locked up. P405

Disposal

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

Supplemental label information 22,48% of the mixture consists of component(s) of unknown acute oral toxicity. 42,6% 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
Formaldehyde, Polymer With Benzenamine, Hydrogenated	10 - 30	135108-88-2 -	-	-	
Classificat	ion: -				
nonylphenol; [1] 4-nonylphenol, branched [2]	10 - 30	84852-15-3 284-325-5	01-2119510715-45-0000	601-053-00-8	ED
Classificat			ng/kg bw), Skin Corr. 1B;H31 iic Acute 1;H400, Aquatic Ch		
4-tert-butylphenol	5 - 10	98-54-4 202-679-0	-	604-090-00-8	ED
Classificat			H318, Repr. 2;H361f, Aquatio Chronic 2;H411(M=1)		
benzyl alcohol	5 - 10	100-51-6 202-859-9	01-2119492630-38-0000	603-057-00-5	
Classificat			ng/kg bw), Acute Tox. 4;H31 (ATE: 11 mg/l), Aquatic Chro		
1,3-Benzenedimethanamine	1 - 5	1477-55-0 216-032-5	01-2119480150-50-0000	-	
Classificat	ion: -				
TRIMETHYLHEXAMETHYLENEI INE	DIAM 1 - 5	25620-58-0 247-134-8	-	-	
Classificat	ion: Skin Corr.	1C;H314, Eye Dam.	1;H318		
nonylphenol; [1] 4-nonylphenol, branched [2]	0,1 - 1	25154-52-3 246-672-0	-	601-053-00-8	ED
Classificat			ng/kg bw), Skin Corr. 1B;H31 ic Acute 1;H400, Aquatic Ch		

30 - 60 Other components below reportable

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.

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

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. 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.

Remove contaminated clothing immediately and wash skin with soap and water. Chemical burns Skin contact

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.

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Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact

present and easy to do. Continue rinsing. Get medical attention immediately.

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If Ingestion 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

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

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

Unsuitable extinguishing media

5.2. Special hazards arising

from the substance or mixture

5.3. Advice for firefighters Special protective

equipment for firefighters

Special fire fighting procedures

During fire, gases hazardous to health may be formed.

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

Alcohol resistant foam. Powder. Carbon dioxide (CO2).

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

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 vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

For emergency responders

Keep unnecessary personnel away. Ensure adequate ventilation. 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 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. 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.

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 vapor. Do not get in eyes, on skin, or on clothing. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. 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

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

- E1 Hazardous to the Aquatic Environment Acute (Lower-tier requirements = 100 tons; Upper-tier requirements = 200 tons)

4 mg/m3

- E2 Hazardous to the Aquatic Environment Chronic (Lower-tier requirements = 200 tons; Upper-tier requirements = 500 tons)

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

Silicon Dioxide (CAS

112945-52-5)

Austria. MAK List, OEL Ordinance Components	e (GwV), BGBI. II, no. 184/2001 Type	, as amended Value	Form
1,3-Benzenedimethanamin e (CAS 1477-55-0)	Ceiling	0,1 mg/m3	
	MAK	0,1 mg/m3	
4-tert-butylphenol (CAS 98-54-4)	MAK	0,5 mg/m3	
		0,08 ppm	
	STEL	2,5 mg/m3	
		0,4 ppm	

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

Components	Туре	Value
1,3-Benzenedimethanamin	Ceiling	0,1 mg/m3
e (CAS 1477-55-0)		

MAK

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

Components	Туре	Value	Form
benzyl alcohol (CAS 100-51-6)	TWA	5 mg/m3	
Silicon Dioxide (CAS 112945-52-5)	TWA	10 mg/m3	Inhalable fraction.
		0.07 ma/m3	Respirable fraction.

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	Туре	Value	Form	
Silicon Dioxide (CAS 112945-52-5)	MAC	6 mg/m3	Total dust.	
		0.1 mg/m3	Respirable dust.	

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

Silicon Dioxide (CAS	TWA	2 mg/m3
112945-52-5)		_

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	Туре	Value	Form
benzyl alcohol (CAS 100-51-6)	Ceiling	80 mg/m3	
	TWA	40 mg/m3	
Silicon Dioxide (CAS 112945-52-5)	TWA	4 mg/m3	Dust.

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Inhalable fraction.

1,3-Benzenedimethanamin	Ceiling	0,1 mg/m3	
e (CAS 1477-55-0)	Coming	o, rg/o	
		0,02 ppm	
4-tert-butylphenol (CAS 98-54-4)	TLV	0,5 mg/m3	
		0,08 ppm	
Estonia Components	Туре	Value	Form
Silicon Dioxide (CAS 112945-52-5)	TWA	2 mg/m3	Fine dust, respirator fraction
Finland. HTP-arvot, App 3., Binding	g Limit Values, Social Affairs	and Ministry of Health	
Components	Туре	Value	
1,3-Benzenedimethanamin e (CAS 1477-55-0)	Ceiling	0,1 mg/m3	
penzyl alcohol (CAS 100-51-6)	TWA	45 mg/m3	
Oiliana Dianida (OAO	T18/8	10 ppm	
Silicon Dioxide (CAS 112945-52-5)	TWA	5 mg/m3	
France. Threshold Limit Values (VI Components	LEP) for Occupational Exposu Type	ıre to Chemicals in France, II Value	NRS ED 984
1,3-Benzenedimethanamin e (CAS 1477-55-0)	VLE	0,1 mg/m3	
Regulatory status: Indicative	limit (VL)		
Germany. DFG MAK List (advisory	OELs). Commission for the li	nvestigation of Health Hazard	ds of Chemical Compou
in the Work Area (DFG), as update	d	-	•
n the Work Area (DFG), as update Components	d Type	Value	Form
in the Work Area (DFG), as updated Components 4-tert-butylphenol (CAS	d	-	•
in the Work Area (DFG), as updated Components 4-tert-butylphenol (CAS	d Type	Value	Form
in the Work Area (DFG), as updated Components 4-tert-butylphenol (CAS 98-54-4) benzyl alcohol (CAS	d Type	Value 0,5 mg/m3	Form Vapor and aerosol.
in the Work Area (DFG), as updated Components 4-tert-butylphenol (CAS 98-54-4) benzyl alcohol (CAS	d Type TWA	Value 0,5 mg/m3 0,08 ppm	Form Vapor and aerosol. Vapor and aerosol.
in the Work Area (DFG), as updated Components 4-tert-butylphenol (CAS 98-54-4)	d Type TWA	Value 0,5 mg/m3 0,08 ppm 22 mg/m3	Form Vapor and aerosol. Vapor and aerosol. Vapor and aerosol.
in the Work Area (DFG), as updated Components 4-tert-butylphenol (CAS 98-54-4) benzyl alcohol (CAS 100-51-6) Silicon Dioxide (CAS 112945-52-5) Germany. TRGS 900, Limit Values	Type TWA TWA	Value 0,5 mg/m3 0,08 ppm 22 mg/m3 5 ppm 4 mg/m3	Form Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Inhalable fraction.
in the Work Area (DFG), as updated Components 4-tert-butylphenol (CAS 98-54-4) benzyl alcohol (CAS 100-51-6) Silicon Dioxide (CAS 112945-52-5) Germany. TRGS 900, Limit Values	Type TWA TWA	Value 0,5 mg/m3 0,08 ppm 22 mg/m3 5 ppm 4 mg/m3	Form Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Vapor and aerosol.
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in the Work Area (DFG), as updated Components 4-tert-butylphenol (CAS 98-54-4) benzyl alcohol (CAS 100-51-6) Silicon Dioxide (CAS 112945-52-5)	Type TWA TWA TWA TWA in the Ambient Air at the Worl	Value 0,5 mg/m3 0,08 ppm 22 mg/m3 5 ppm 4 mg/m3 kplace Value 0,5 mg/m3	Form Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Inhalable fraction. Form Vapor and aerosol.
in the Work Area (DFG), as updated Components 4-tert-butylphenol (CAS 98-54-4) benzyl alcohol (CAS 100-51-6) Silicon Dioxide (CAS 112945-52-5) Germany. TRGS 900, Limit Values Components 4-tert-butylphenol (CAS 98-54-4) benzyl alcohol (CAS	Type TWA TWA TWA in the Ambient Air at the Worl Type AGW	Value 0,5 mg/m3 0,08 ppm 22 mg/m3 5 ppm 4 mg/m3 kplace Value 0,5 mg/m3 0,08 ppm	Form Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Inhalable fraction. Form Vapor and aerosol. Vapor and aerosol.
in the Work Area (DFG), as updated Components 4-tert-butylphenol (CAS 98-54-4) benzyl alcohol (CAS 100-51-6) Silicon Dioxide (CAS 112945-52-5) Germany. TRGS 900, Limit Values Components 4-tert-butylphenol (CAS 98-54-4) benzyl alcohol (CAS	Type TWA TWA TWA in the Ambient Air at the Worl Type AGW	Value 0,5 mg/m3 0,08 ppm 22 mg/m3 5 ppm 4 mg/m3 kplace Value 0,5 mg/m3 0,08 ppm 22 mg/m3	Form Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Inhalable fraction. Form Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Vapor and aerosol.
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in the Work Area (DFG), as updated Components 4-tert-butylphenol (CAS 98-54-4) benzyl alcohol (CAS 100-51-6) Silicon Dioxide (CAS 112945-52-5) Germany. TRGS 900, Limit Values Components 4-tert-butylphenol (CAS 98-54-4) benzyl alcohol (CAS 100-51-6) Silicon Dioxide (CAS 112945-52-5) Silicon Dioxide (CAS 112945-52-5) Iceland. OELs. Regulation 390/2008 Components	Type TWA TWA TWA TWA in the Ambient Air at the Worl Type AGW AGW AGW On Pollution Limits and Mea	Value 0,5 mg/m3 0,08 ppm 22 mg/m3 5 ppm 4 mg/m3 kplace Value 0,5 mg/m3 0,08 ppm 22 mg/m3 5 ppm 4 mg/m3 sures to Reduce Pollution at Value	Form Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Inhalable fraction. Form Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Inhalable fraction.
in the Work Area (DFG), as updated Components 4-tert-butylphenol (CAS 98-54-4) benzyl alcohol (CAS 100-51-6) Silicon Dioxide (CAS 112945-52-5) Germany. TRGS 900, Limit Values Components 4-tert-butylphenol (CAS 98-54-4) benzyl alcohol (CAS 100-51-6) Silicon Dioxide (CAS 112945-52-5)	Type TWA TWA TWA TWA in the Ambient Air at the Worl Type AGW AGW AGW On Pollution Limits and Mea	Value 0,5 mg/m3 0,08 ppm 22 mg/m3 5 ppm 4 mg/m3 kplace Value 0,5 mg/m3 0,08 ppm 22 mg/m3 5 ppm 4 mg/m3 sures to Reduce Pollution at	Form Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Inhalable fraction. Form Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Inhalable fraction.
in the Work Area (DFG), as updated Components 4-tert-butylphenol (CAS 98-54-4) benzyl alcohol (CAS 100-51-6) Silicon Dioxide (CAS 112945-52-5) Germany. TRGS 900, Limit Values Components 4-tert-butylphenol (CAS 98-54-4) benzyl alcohol (CAS 98-54-4) benzyl alcohol (CAS 112945-52-5) Silicon Dioxide (CAS 112945-52-5) Iceland. OELs. Regulation 390/2008 Components 1,3-Benzenedimethanamin	Type TWA TWA TWA TWA in the Ambient Air at the Worl Type AGW AGW AGW On Pollution Limits and Mea	Value 0,5 mg/m3 0,08 ppm 22 mg/m3 5 ppm 4 mg/m3 kplace Value 0,5 mg/m3 0,08 ppm 22 mg/m3 5 ppm 4 mg/m3 sures to Reduce Pollution at Value	Form Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Inhalable fraction. Form Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Inhalable fraction.
in the Work Area (DFG), as updated Components 4-tert-butylphenol (CAS 98-54-4) benzyl alcohol (CAS 100-51-6) Silicon Dioxide (CAS 112945-52-5) Germany. TRGS 900, Limit Values Components 4-tert-butylphenol (CAS 98-54-4) benzyl alcohol (CAS 100-51-6) Silicon Dioxide (CAS 112945-52-5) Iceland. OELs. Regulation 390/2006 Components 1,3-Benzenedimethanamin e (CAS 1477-55-0) 4-tert-butylphenol (CAS	Type TWA TWA TWA TWA in the Ambient Air at the Worl Type AGW AGW AGW On Pollution Limits and Mea	Value 0,5 mg/m3 0,08 ppm 22 mg/m3 5 ppm 4 mg/m3 kplace Value 0,5 mg/m3 0,08 ppm 22 mg/m3 5 ppm 4 mg/m3 sures to Reduce Pollution at Value 0,1 mg/m3	Form Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Inhalable fraction. Form Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Inhalable fraction.
in the Work Area (DFG), as updated Components 4-tert-butylphenol (CAS 98-54-4) benzyl alcohol (CAS 100-51-6) Silicon Dioxide (CAS 112945-52-5) Germany. TRGS 900, Limit Values Components 4-tert-butylphenol (CAS 98-54-4) benzyl alcohol (CAS 100-51-6) Silicon Dioxide (CAS 112945-52-5) Iceland. OELs. Regulation 390/2006 Components 1,3-Benzenedimethanamin e (CAS 1477-55-0)	Type TWA TWA TWA TWA in the Ambient Air at the Work Type AGW AGW AGW Son Pollution Limits and Mea Type STEL	Value 0,5 mg/m3 0,08 ppm 22 mg/m3 5 ppm 4 mg/m3 kplace Value 0,5 mg/m3 0,08 ppm 22 mg/m3 5 ppm 4 mg/m3 5 ppm 20,08 ppm 21 mg/m3 5 ppm 4 mg/m3 1 mg/m3 1 sures to Reduce Pollution at Value 0,1 mg/m3 0,02 ppm	Form Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Inhalable fraction. Form Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Vapor and aerosol. Inhalable fraction.

Components	Туре	Value	the Workplace, as amende Form
		10 mg/m3	Total dust.
		0,5 mg/m3	Dust.
reland. OELVs, Schedules 1 & 2, Components	Code of Practice for Chemical Type	Agents and Carcinogens Re Value	gulations Form
1,3-Benzenedimethanamin e (CAS 1477-55-0)	TWA	0,1 mg/m3	
Silicon Dioxide (CAS 112945-52-5)	TWA	6 mg/m3	Total inhalable dust.
		2,4 mg/m3	Respirable dust.
taly. OELs (Legislative Decree n.8 Components	31, 9 April 2008), as amended Type	Value	
1,3-Benzenedimethanamin e (CAS 1477-55-0)	Ceiling	0,018 ppm	
Latvia. OELs. Occupational Expos 1), as amended	sure Limits of Chemical Substa	nces at Workplace (Reg. No	. 325/ 2007, L.V. 80, Annex
Components	Туре	Value	
penzyl alcohol (CAS 100-51-6)	TWA	5 mg/m3	
Silicon Dioxide (CAS 112945-52-5)	TWA	1 mg/m3	
ithuania. OELs. Occupational Ex /-824/A1-389), as amended	posure Limit Values for Chemi	cal Substances (Hygiene No	rm HN 23:2011; Order No.
Components	Туре	Value	
penzyl alcohol (CAS 100-51-6)	TWA	5 mg/m3	
Norway. Regulation No. 1358 on N	leasures and Limit Values for I	Physical and Chemical Facto	ors in Work Environment a
nfection Groups for Biological Fa			F
omnonante			
<u> </u>	Туре	Value	Form
1,3-Benzenedimethanamin e (CAS 1477-55-0)	Ceiling	0,1 mg/m3	TOTH
1,3-Benzenedimethanamin e (CAS 1477-55-0) Silicon Dioxide (CAS			Respirable dust.
1,3-Benzenedimethanamin e (CAS 1477-55-0) Silicon Dioxide (CAS 112945-52-5) Poland. Maximum permissible coi	Ceiling TLV	0,1 mg/m3 1,5 mg/m3	Respirable dust.
1,3-Benzenedimethanamin e (CAS 1477-55-0) Bilicon Dioxide (CAS 112945-52-5) Poland. Maximum permissible coi 1286/2018, Annex 1)	Ceiling TLV	0,1 mg/m3 1,5 mg/m3	Respirable dust.
Components 1,3-Benzenedimethanamin e (CAS 1477-55-0) Silicon Dioxide (CAS 112945-52-5) Poland. Maximum permissible con 1286/2018, Annex 1) Components Denzyl alcohol (CAS	Ceiling TLV ncentrations and intensities of	0,1 mg/m3 1,5 mg/m3 harmful factors in the work	Respirable dust.
1,3-Benzenedimethanamin e (CAS 1477-55-0) Silicon Dioxide (CAS 112945-52-5) Poland. Maximum permissible cor 1286/2018, Annex 1) Components Denzyl alcohol (CAS 100-51-6)	Ceiling TLV ncentrations and intensities of Type TWA	0,1 mg/m3 1,5 mg/m3 harmful factors in the work of Value 240 mg/m3	Respirable dust.
1,3-Benzenedimethanamin e (CAS 1477-55-0) Silicon Dioxide (CAS 112945-52-5) Poland. Maximum permissible con 1286/2018, Annex 1) Components Denzyl alcohol (CAS 100-51-6) Portugal. VLEs. Norm on occupation	Ceiling TLV ncentrations and intensities of Type TWA	0,1 mg/m3 1,5 mg/m3 harmful factors in the work of Value 240 mg/m3	Respirable dust.
1,3-Benzenedimethanamin e (CAS 1477-55-0) Silicon Dioxide (CAS 112945-52-5) Poland. Maximum permissible con 1286/2018, Annex 1) Components Denzyl alcohol (CAS 100-51-6) Portugal. VLEs. Norm on occupation Components 1,3-Benzenedimethanamin	Ceiling TLV ncentrations and intensities of Type TWA fonal exposure to chemical age	0,1 mg/m3 1,5 mg/m3 harmful factors in the work of Value 240 mg/m3 ents (NP 1796-2014)	Respirable dust.
1,3-Benzenedimethanamin e (CAS 1477-55-0) Silicon Dioxide (CAS 112945-52-5) Poland. Maximum permissible cor 1286/2018, Annex 1) Components Denzyl alcohol (CAS 100-51-6) Portugal. VLEs. Norm on occupation Components 1,3-Benzenedimethanamin e (CAS 1477-55-0) Slovakia. OELs. Maximum permis	Ceiling TLV Incentrations and intensities of Type TWA Ional exposure to chemical age Type Ceiling	0,1 mg/m3 1,5 mg/m3 harmful factors in the work of Value 240 mg/m3 ents (NP 1796-2014) Value 0,1 mg/m3	Respirable dust. environment (Dz.U.Poz.
I,3-Benzenedimethanamin (CAS 1477-55-0) Silicon Dioxide (CAS 12945-52-5) Poland. Maximum permissible cor 1286/2018, Annex 1) Components Denzyl alcohol (CAS 100-51-6) Portugal. VLEs. Norm on occupation Components I,3-Benzenedimethanamin (CAS 1477-55-0) Slovakia. OELs. Maximum permis Annex 1, Table 1, as amended)	Ceiling TLV Incentrations and intensities of Type TWA Ional exposure to chemical age Type Ceiling	0,1 mg/m3 1,5 mg/m3 harmful factors in the work of Value 240 mg/m3 ents (NP 1796-2014) Value 0,1 mg/m3	Respirable dust. environment (Dz.U.Poz.
I,3-Benzenedimethanamin (CAS 1477-55-0) Silicon Dioxide (CAS 112945-52-5) Poland. Maximum permissible con 1286/2018, Annex 1) Components Denzyl alcohol (CAS 100-51-6) Portugal. VLEs. Norm on occupation Components I,3-Benzenedimethanamin (CAS 1477-55-0) Slovakia. OELs. Maximum permis Annex 1, Table 1, as amended) Components I-tert-butylphenol (CAS	Ceiling TLV Incentrations and intensities of Type TWA Ional exposure to chemical age Type Ceiling sible exposure limits for chem	0,1 mg/m3 1,5 mg/m3 harmful factors in the work of Value 240 mg/m3 ents (NP 1796-2014) Value 0,1 mg/m3 ical factors in workplace air	Respirable dust. environment (Dz.U.Poz.
I,3-Benzenedimethanamin (CAS 1477-55-0) Silicon Dioxide (CAS 112945-52-5) Poland. Maximum permissible con 1286/2018, Annex 1) Components Denzyl alcohol (CAS 100-51-6) Portugal. VLEs. Norm on occupation Components I,3-Benzenedimethanamin (CAS 1477-55-0) Slovakia. OELs. Maximum permis Annex 1, Table 1, as amended) Components I-tert-butylphenol (CAS	Ceiling TLV Incentrations and intensities of Type TWA Ional exposure to chemical age Type Ceiling sible exposure limits for chem	0,1 mg/m3 1,5 mg/m3 harmful factors in the work of Value 240 mg/m3 ents (NP 1796-2014) Value 0,1 mg/m3 ical factors in workplace air Value	Respirable dust. environment (Dz.U.Poz.
1,3-Benzenedimethanamin e (CAS 1477-55-0) Silicon Dioxide (CAS 112945-52-5) Poland. Maximum permissible con 1286/2018, Annex 1) Components Denzyl alcohol (CAS 100-51-6) Portugal. VLEs. Norm on occupation Components 1,3-Benzenedimethanamin e (CAS 1477-55-0) Slovakia. OELs. Maximum permis Annex 1, Table 1, as amended) Components 4-tert-butylphenol (CAS 198-54-4) Silicon Dioxide (CAS	Ceiling TLV Incentrations and intensities of Type TWA Ional exposure to chemical age Type Ceiling sible exposure limits for chem	0,1 mg/m3 1,5 mg/m3 harmful factors in the work of Value 240 mg/m3 ents (NP 1796-2014) Value 0,1 mg/m3 ical factors in workplace air Value 0,5 mg/m3	Respirable dust. environment (Dz.U.Poz.
1,3-Benzenedimethanamin e (CAS 1477-55-0) Silicon Dioxide (CAS 112945-52-5) Poland. Maximum permissible con 1286/2018, Annex 1) Components Denzyl alcohol (CAS 100-51-6) Portugal. VLEs. Norm on occupati Components 1,3-Benzenedimethanamin e (CAS 1477-55-0) Slovakia. OELs. Maximum permis Annex 1, Table 1, as amended) Components 4-tert-butylphenol (CAS 18-54-4) Silicon Dioxide (CAS 112945-52-5) Slovenia. OELs. Occupational Expedue to Exp. to Chemicals at Work,	Ceiling TLV Incentrations and intensities of Type TWA Ional exposure to chemical age Type Ceiling Sible exposure limits for chem Type TWA TWA TWA TWA TOOSURE Limits of Chemicals at N Annex I), as amended	0,1 mg/m3 1,5 mg/m3 harmful factors in the work of Value 240 mg/m3 ents (NP 1796-2014) Value 0,1 mg/m3 ical factors in workplace air Value 0,5 mg/m3 0,08 ppm 0,3 mg/m3 Norkplace (Reg. on Protection	Respirable dust. environment (Dz.U.Poz. (Regulation No 355/2006,
1,3-Benzenedimethanamin e (CAS 1477-55-0) Silicon Dioxide (CAS 112945-52-5) Poland. Maximum permissible con 1286/2018, Annex 1) Components Denzyl alcohol (CAS 100-51-6) Portugal. VLEs. Norm on occupati Components 1,3-Benzenedimethanamin e (CAS 1477-55-0) Slovakia. OELs. Maximum permis Annex 1, Table 1, as amended) Components 4-tert-butylphenol (CAS 188-54-4) Silicon Dioxide (CAS 112945-52-5) Slovenia. OELs. Occupational Exp due to Exp. to Chemicals at Work, Components	Ceiling TLV Incentrations and intensities of Type TWA Ional exposure to chemical age Type Ceiling sible exposure limits for chem Type TWA TWA TWA TWA TOOSURE Limits of Chemicals at No. Annex I), as amended Type	0,1 mg/m3 1,5 mg/m3 harmful factors in the work of Value 240 mg/m3 ents (NP 1796-2014) Value 0,1 mg/m3 ical factors in workplace air Value 0,5 mg/m3 0,08 ppm 0,3 mg/m3	Respirable dust. environment (Dz.U.Poz.
1,3-Benzenedimethanamin e (CAS 1477-55-0) Silicon Dioxide (CAS 112945-52-5) Poland. Maximum permissible coi 1286/2018, Annex 1) Components	Ceiling TLV Incentrations and intensities of Type TWA Ional exposure to chemical age Type Ceiling Sible exposure limits for chem Type TWA TWA TWA TWA TOOSURE Limits of Chemicals at N Annex I), as amended	0,1 mg/m3 1,5 mg/m3 harmful factors in the work of Value 240 mg/m3 ents (NP 1796-2014) Value 0,1 mg/m3 ical factors in workplace air Value 0,5 mg/m3 0,08 ppm 0,3 mg/m3 Norkplace (Reg. on Protection	Respirable dust. environment (Dz.U.Poz. (Regulation No 355/2006,

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	Туре	Value	Form
benzyl alcohol (CAS 100-51-6)	TWA	22 mg/m3	
		5 ppm	
Silicon Dioxide (CAS 112945-52-5)	TWA	4 mg/m3	Inhalable fraction.
Switzerland. SUVA Grenzwerte ar	n Arbeitsplatz: Aktuelle MAK-	Werte	
Components	Туре	Value	Form
1,3-Benzenedimethanamin e (CAS 1477-55-0)	TWA	0,1 mg/m3	
4-tert-butylphenol (CAS 98-54-4)	STEL	1 mg/m3	Vapor and aerosol.
		0,16 ppm	Vapor and aerosol.
	TWA	0,5 mg/m3	Vapor and aerosol.
		0,08 ppm	Vapor and aerosol.
benzyl alcohol (CAS 100-51-6)	TWA	22 mg/m3	Vapor and aerosol.
		5 ppm	Vapor and aerosol.
UK. OELs. Workplace Exposure L	imits (WELs) (EH40/2005 (Fou	urth Edition 2020)), Table 1	
Components	Type	Value	Form
Silicon Dioxide (CAS 112945-52-5)	TWA	6 mg/m3	Inhalable dust.
		2,4 mg/m3	Respirable dust.

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
4-tert-butylphenol (CAS 98-54-4)	2 mg/l	PTBP	Urine	*
	13,3 umol/l	PTBP	Urine	*

^{* -} For sampling details, please see the source document.

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

Components	Value	Determinant	Specimen	Sampling Time
4-tert-butylphenol (CAS 98-54-4)	2 mg/l	PTBP (nach Hydrolyse)	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
4-tert-butylphenol (CAS 98-54-4)	1,36 mg/g	p-tert-butylphe nol	Creatinine in urine	*
	2 mg/l	p-tert-butylphe nol	Urine	*

^{* -} For sampling details, please see the source document.

Switzerland. SUVA Grenzwerte am Arbeitsplatz: Aktuelle BAT-Werte

Components	Value	Determinant	Specimen	Sampling Time
4-tert-butylphenol (CAS 98-54-4)	2 mg/l	p-tert-Butylphe nol	Urine	*

^{* -} For sampling details, please see the source document.

Recommended monitoring procedures

Follow standard monitoring procedures.

Derived no effect levels

Not available.

(DNELs)

Predicted no effect Not available.

concentrations (PNECs)

Material name: PhillyBond Orange Hardener

Occupational Exposure Limits are not relevant to the current physical form of the product. **Exposure guidelines**

Austria MAK: Skin designation

4-tert-butylphenol (CAS 98-54-4) Can be absorbed through the skin.

Belgium OELs: Skin designation

1,3-Benzenedimethanamine (CAS 1477-55-0) Can be absorbed through the skin.

Denmark GV: Skin designation

1,3-Benzenedimethanamine (CAS 1477-55-0) Can be absorbed through the skin. 4-tert-butylphenol (CAS 98-54-4) Can be absorbed through the skin.

Finland Exposure Limit Values: Skin designation

1,3-Benzenedimethanamine (CAS 1477-55-0) Can be absorbed through the skin.

Germany DFG MAK (advisory): Skin designation

4-tert-butylphenol (CAS 98-54-4) Can be absorbed through the skin. benzyl alcohol (CAS 100-51-6) Can be absorbed through the skin.

Germany TRGS 900 Limit Values: Skin designation

4-tert-butylphenol (CAS 98-54-4) Can be absorbed through the skin. benzyl alcohol (CAS 100-51-6) Can be absorbed through the skin.

Iceland OELs: Skin designation

1,3-Benzenedimethanamine (CAS 1477-55-0) Can be absorbed through the skin. 4-tert-butylphenol (CAS 98-54-4) Can be absorbed through the skin.

Italy OELs: Skin designation

1,3-Benzenedimethanamine (CAS 1477-55-0) Danger of cutaneous absorption

Lithuania OELs: Skin designation

benzyl alcohol (CAS 100-51-6) Can be absorbed through the skin.

Portugal VLEs Norm on Occupatioinal Exposure: Skin designation

1,3-Benzenedimethanamine (CAS 1477-55-0) 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)

4-tert-butylphenol (CAS 98-54-4) Can be absorbed through the skin. benzyl alcohol (CAS 100-51-6) Can be absorbed through the skin.

Switzerland SUVA Limit Values at the Workplace: Skin designation

1,3-Benzenedimethanamine (CAS 1477-55-0) Can be absorbed through the skin. benzyl alcohol (CAS 100-51-6) 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

Use personal protective equipment as required. Personal protection equipment should be chosen **General information**

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) and a face shield.

Skin protection

- Hand protection Wear appropriate chemical resistant gloves.

- Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

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.

Contaminated work clothing should not be allowed out of the workplace.

Environmental exposure

controls

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

Not available. **Physical state** Form Paste.

Material name: PhillyBond Orange Hardener

ColorAmberOdorAmmoniacal.Melting point/freezing pointNot available.Boiling point or initial boilingNot available.

point and boiling range

Not available.

Flash point >200,0 °F (>93,3 °C)

Auto-ignition temperature

Decomposition temperature

PH

Not available.

Not available.

Not available.

Not available.

Solubility

Flammability

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water) (log value)

Vapor pressure Not available.

Density and/or relative density

Density 8,81 lb/gal

Vapor density >1

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

Evaporation rate <1 BuAc **Specific gravity** 1,06

SECTION 10: Stability and reactivity

10.1. ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability Material is stable under normal conditions.

10.3. Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid Avoid temperatures exceeding the flash point. Contact with incompatible materials.

10.5. Incompatible materials Alkaline metals

10.6. Hazardous No hazardous decomposition products are known.

decomposition products

SECTION 11: Toxicological information

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

Information on likely routes of exposure

Inhalation May cause irritation to the respiratory system.

Skin contact Causes severe skin burns. Harmful in contact with skin. May cause an allergic skin reaction.

Eye contact Causes serious eye damage.

Ingestion Causes digestive tract burns.

Symptoms 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.

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

Acute toxicity Harmful in contact with skin.

Components Species Test Results

benzyl alcohol (CAS 100-51-6)

Acute Dermal

LD50 Rabbit 2000 mg/kg

Components **Species Test Results**

nonylphenol; [1] 4-nonylphenol, branched [2] (CAS 25154-52-3)

Dermal

LD50 Rabbit 2140 mg/kg

nonylphenol; [1] 4-nonylphenol, branched [2] (CAS 84852-15-3)

Acute Dermal

LD50 Rabbit 2140 mg/kg

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye

irritation

Causes serious eye damage.

Respiratory sensitization Due to partial or complete lack of data the classification is not possible.

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity Due to partial or complete lack of data the classification is not possible. Due to partial or complete lack of data the classification is not possible. Carcinogenicity

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

4-tert-butylphenol (CAS 98-54-4)

nonylphenol; [1] 4-nonylphenol, branched [2] (CAS 25154-52-3) nonylphenol; [1] 4-nonylphenol, branched [2] (CAS 84852-15-3)

Suspected of damaging fertility. Suspected of damaging the unborn child. Reproductive toxicity

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

4-tert-butylphenol (CAS 98-54-4) Toxic for reproduction - category 2.

Specific target organ toxicity -

single exposure

Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity -

repeated exposure

Due to partial or complete lack of data the classification is not possible.

Aspiration hazard Due to partial or complete lack of data the classification is not possible.

Mixture versus substance

information

No information available.

11.2. Information on other hazards

Endocrine disrupting

properties

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.

Not available. Other information

SECTION 12: Ecological information

12.1. Toxicity Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

12.2. Persistence and

degradability

No data is available on the degradability of any ingredients in the mixture.

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

> benzyl alcohol 1,1 nonylphenol; [1] 4-nonylphenol, branched [2] 5.71

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

The product contains volatile organic compounds which have a photochemical ozone creation potential.

Material name: PhillyBond Orange Hardener

12.8. Additional information

Estonia Dangerous substances in soil Data

benzyl alcohol (CAS 100-51-6) 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

Residual waste 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).

Contaminated packaging 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.

EU waste codeThe Waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Disposal methods/information 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.

Special precautions Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number UN2735

14.2. UN proper shipping AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S.

name (nonylphenol; [1] 4-nonylphenol, branched [2], TRIMETHYLHEXAMETHYLENEDIAMINE)

14.3. Transport hazard class(es)

Class 8
Subsidiary risk Label(s) 8
Hazard No. (ADR) 80
Tunnel restriction code E
14.4. Packing group ||
14.5. Environmental hazards No.

14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling.

for user

RID

14.1. UN number UN2735

14.2. UN proper shipping nameAMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. or POLYAM

14.3. Transport hazard class(es)

Class 8
Subsidiary risk Label(s) 8
14.4. Packing group ||
14.5. Environmental hazards Yes

14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling.

for user

ADN

14.1. UN number UN2735

14.2. UN proper shippingAMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S.

name (nonylphenol; [1] 4-nonylphenol, branched [2], TRIMETHYLHEXAMETHYLENEDIAMINE)

14.3. Transport hazard class(es)

Class 8
Subsidiary risk Label(s) 8
14.4. Packing group II
14.5. Environmental hazards No.

14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling.

for user

Material name: PhillyBond Orange Hardener

IATA

14.1. UN number UN2735

Amines, liquid, corrosive, n.o.s. (nonylphenol; [1] 4-nonylphenol, branched [2], 14.2. UN proper shipping

TRIMETHYLHEXAMETHYLENEDIAMINE) name

14.3. Transport hazard class(es)

Class 8 Subsidiary risk 14.4. Packing group Ш 14.5. Environmental hazards Yes **ERG Code**

14.6. Special precautions

for user

Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo

Allowed with restrictions.

aircraft

Allowed with restrictions. Cargo aircraft only

IMDG

UN2735 14.1. UN number

14.2. UN proper shipping Amines, liquid, corrosive, n.o.s. (nonylphenol; [1] 4-nonylphenol, branched [2],

TRIMETHYLHEXAMETHYLENEDIAMINE), MARINE POLLUTANT name

14.3. Transport hazard class(es)

8 Class Subsidiary risk Ш 14.4. Packing group 14.5. Environmental hazards

Marine pollutant Yes **EmS**

14.6. Special precautions

for user

Read safety instructions, SDS and emergency procedures before handling.

14.7. Maritime transport in bulk

Not applicable. Not established.

according to IMO instruments



Marine pollutant



IMDG Regulated Marine Pollutant. **General information**

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

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

nonylphenol; [1] 4-nonylphenol, branched [2] (CAS 25154-52-3) nonylphenol; [1] 4-nonylphenol, branched [2] (CAS 84852-15-3)

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

nonylphenol; [1] 4-nonylphenol, branched [2] (CAS 25154-52-3) nonylphenol; [1] 4-nonylphenol, branched [2] (CAS 84852-15-3)

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

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

Austria: NYD0-901F-T00G-QA3E

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

nonylphenol; [1] 4-nonylphenol, branched [2] (CAS 25154-52-3) nonylphenol; [1] 4-nonylphenol, branched [2] (CAS 84852-15-3) 4-tert-butylphenol (CAS 98-54-4)

UFI:

Belgium: NYD0-901F-T00G-QA3E Bulgaria: NYD0-901F-T00G-QA3E Croatia: NYD0-901F-T00G-QA3E Cyprus: NYD0-901F-T00G-QA3E Czech Republic: NYD0-901F-T00G-QA3E Denmark: NYD0-901F-T00G-QA3E Estonia: NYD0-901F-T00G-QA3E EU: NYD0-901F-T00G-QA3E Finland: NYD0-901F-T00G-QA3E France: NYD0-901F-T00G-QA3E Germany: NYD0-901F-T00G-QA3E Greece: NYD0-901F-T00G-QA3E Hungary: NYD0-901F-T00G-QA3E Iceland: NYD0-901F-T00G-QA3E Ireland: NYD0-901F-T00G-QA3E Italy: NYD0-901F-T00G-QA3E Latvia: NYD0-901F-T00G-QA3E Lithuania: NYD0-901F-T00G-QA3E Luxembourg: NYD0-901F-T00G-QA3E Malta: NYD0-901F-T00G-QA3E Netherlands: NYD0-901F-T00G-QA3E Norway: NYD0-901F-T00G-QA3E Poland: NYD0-901F-T00G-QA3E Portugal: NYD0-901F-T00G-QA3E Romania: NYD0-901F-T00G-QA3E Slovakia: NYD0-901F-T00G-QA3E Slovenia: NYD0-901F-T00G-QA3E Spain: NYD0-901F-T00G-QA3E

Authorizations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended Not listed.

Sweden: NYD0-901F-T00G-QA3E

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

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

4-tert-butylphenol (CAS 98-54-4)

nonylphenol; [1] 4-nonylphenol, branched [2] (CAS 25154-52-3) nonylphenol; [1] 4-nonylphenol, branched [2] (CAS 84852-15-3)

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

- E1 Hazardous to the Aquatic Environment Acute - 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

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 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

Austria UFI: NYD0-901F-T00G-QA3E UFI: NYD0-901F-T00G-QA3E **Belgium** UFI: NYD0-901F-T00G-QA3E **Czech Republic** UFI: NYD0-901F-T00G-QA3E **Denmark** UFI: NYD0-901F-T00G-QA3E **European Union Finland** UFI: NYD0-901F-T00G-QA3E **France** UFI: NYD0-901F-T00G-QA3E Germany UFI: NYD0-901F-T00G-QA3E UFI: NYD0-901F-T00G-QA3E Greece Hungary UFI: NYD0-901F-T00G-QA3E Italy UFI: NYD0-901F-T00G-QA3E **Netherlands** UFI: NYD0-901F-T00G-QA3E UFI: NYD0-901F-T00G-QA3E Norway UFI: NYD0-901F-T00G-QA3E Poland **Portugal** UFI: NYD0-901F-T00G-QA3E Slovakia UFI: NYD0-901F-T00G-QA3E UFI: NYD0-901F-T00G-QA3E Slovenia UFI: NYD0-901F-T00G-QA3E Spain Sweden UFI: NYD0-901F-T00G-QA3E UFI: NYD0-901F-T00G-QA3E Switzerland

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.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

Material name: PhillyBond Orange Hardener

H361f Suspected of damaging fertility.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

Physical & Chemical Properties: Multiple Properties

Follow training instructions when handling this material.

Revision information Training information 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

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.

Material name: PhillyBond Orange Hardener