SAFETY DATA SHEET

H 2P81 FILLER Harden-R Plus slow 1L

Version	Revision Date:	SDS Number:	Date of last issue: 20.01.2026
3.0	12.05.2026	000000002050011780	Date of first issue: 05.01.2026

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

1.1 Product identifier

Trade name : H 2P81 FILLER Harden-R Plus slow 1L

Product code : 000000002050011780

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

Use of the Substance/Mixture : Spraying hardener

1.3 Details of the supplier of the safety data sheet

Company:
BASF Coatings France SAS
Z.I de Breuil-Le-Sec, Rue André Pommery
60480 Breuil-Le-Sec
France

Telephone: +33 3 4477-7777
E-mail address: Product-Stewardship-EMEA@basf.com

1.4 Emergency telephone

Local: 080 001 4676 (english)
International: +44 20 3885 0382 (multilingual)
National emergency number: +27 11 203 2420

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3	H226: Flammable liquid and vapor.
Acute toxicity, Category 4	H332: Harmful if inhaled.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Skin sensitization, Category 1	H317: May cause an allergic skin reaction.

Specific target organ toxicity - single exposure, Category 3, Respiratory system	H335: May cause respiratory irritation.
Specific target organ toxicity - single exposure, Category 3, Central nervous system	H336: May cause drowsiness or dizziness.
Aspiration hazard, Category 1	H304: May be fatal if swallowed and enters airways.
Long-term (chronic) aquatic hazard, Category 3	H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labeling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal Word : Danger

Hazard Statements :

H226	Flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

Precautionary Statements :

Prevention:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing mist or vapors.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

Response:

P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P331	Do NOT induce vomiting.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Hazardous ingredients which must be listed on the label:

HDI-Oligomer(Trimer)
2-butoxyethyl acetate
n-Butyl acetate

Solvent naphtha (petroleum), light arom.

Additional Labeling

EUH204 Contains isocyanates. May produce an allergic reaction.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : polyisocyanate
organic solvent

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
HDI-Oligomer(Trimer)	28182-81-2	Acute Tox. 4; H332 Skin Sens. 1; H317 STOT SE 3; H335 (Respiratory system)	>= 25 - < 50
2-butoxyethyl acetate	112-07-2 203-933-3 607-038-00-2	Acute Tox. 4; H302 Acute Tox. 4; H332 Acute Tox. 4; H312	>= 15 - < 20
n-Butyl acetate	123-86-4 204-658-1 607-025-00-1 01-2119485493-29-0004 01-2119485493-29-0005	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system)	>= 12,5 - < 15
Solvent naphtha (petroleum), light arom.	128601-23-0 918-668-5 01-2119455851-35	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system)	>= 12,5 - < 15

		STOT SE 3; H335 (Respiratory system) Asp. Tox. 1; H304 Aquatic Chronic 2; H411	
trimethoxy(3-(oxiranylmethoxy)propyl)silane	2530-83-8 219-784-2	Eye Dam. 1; H318 Aquatic Chronic 3; H412	>= 2,5 - < 3

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice : First aid personnel should pay attention to their own safety.
Immediately remove contaminated clothing.
In case of intoxication, call a poison control center or physician for treatment advice, taking the packaging or the label of the product.
Symptoms of poisoning may occur even after several hours, continue medical observation for at least 48 hours after the accident.
Move out of dangerous area.
Never give anything by mouth to an unconscious person.
Keep patient warm and at rest.

If inhaled : If breathed in, move person into fresh air.
Call a physician or poison control center immediately.
If breathing is irregular or stopped, administer artificial respiration.

In case of skin contact : Call a physician immediately.
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

In case of eye contact : Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.
Call a physician immediately.
If easy to do, remove contact lens, if worn.

If swallowed : Do not induce vomiting due to aspiration hazard.
Keep at rest.
Rinse mouth with water.
If swallowed, call a poison control center or doctor immediate-

ly.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

Risks : When inhaled (e.g. during vomiting) risk of pulmonary oedema and/or pneumonia.
Risk of product entering the lungs on vomiting after ingestion.

May be fatal if swallowed and enters airways.
May cause an allergic skin reaction.
Causes serious eye irritation.
Harmful if inhaled.
May cause respiratory irritation.
May cause drowsiness or dizziness.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No known specific antidote.
Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Water spray
Dry powder
Foam
Carbon dioxide (CO2)

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting : Fire will produce dense black smoke containing hazardous combustion products (see section 10).

Hazardous combustion products : Nitrogen oxides (NOx)

5.3 Advice for firefighters

Special protective equipment for fire-fighters : Appropriate breathing apparatus may be required.

Further information	:	Cool containers/tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.2 Environmental precautions

Environmental precautions	:	Do not allow uncontrolled discharge of product into the environment. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	:	Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth. Place in a suitable container. The contaminated area should be cleaned up immediately with a suitable decontaminant. One possible (flammable) decontaminant comprises (by volume): ethanol or isopropyl alcohol (50 parts); water (45 parts); concentrated ammonia solution (5 parts). A non-flammable alternative is: sodium carbonate (5 parts); water (95 parts). Add the same decontaminant to the remnants and let stand for several days until no further reaction in non-sealed container. Once this stage is reached, close container and dispose according to the waste regulations (see section 13). Ensure adequate ventilation.

6.4 Reference to other sections

For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on protection against fire and explosion	:	Avoid all sources of ignition: heat, sparks, open flame. Product may charge electrostatically: always use earthing leads when transferring from one container to another and earth containers. It is recommended that operators should wear antistatic clothing and footwear. Solvent vapors are heavier than air and

spread along floors. Vapor forms explosive mixtures with air.

The relevant fire protection measures should be noted. Use explosion-proof equipment.

Hygiene measures : Remove contaminated clothing immediately and dispose of safely.
Wash hands before breaks and at the end of workday. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Further information on storage conditions : Keep in a cool, well-ventilated place. Avoid direct sunlight. Close containers carefully once opened and store them upright in order to prevent any leakage. No smoking. No admission for unauthorised personnel. Exercise caution when opening to allow pressure release. Precautions should be taken to minimise exposure to atmospheric humidity or water: carbon dioxide will be formed which in closed containers can result pressurisation. Always keep in containers of same material as the original one. Observe label precautions.

Advice on common storage : Keep away from oxidising agents, strongly alkaline and strongly acidic materials, amines, alcohols and water. Uncontrolled exothermic reactions occur with amines and alcohols. The product reacts with water resulting in evolution of carbon dioxide. In closed containers, pressure build up could result in distortion, blowing and in extreme cases bursting of the container.

Packaging material : Suitable material: Carbon steel (Iron), tinned carbon steel (Tinplate), Galvanized carbon steel (Zinc)

7.3 Specific end use(s)

Specific use(s) : Please refer to the technical leaflet for further information.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
2-butoxyethyl acetate	112-07-2	STEL	50 ppm 333 mg/m3	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
		TWA	20 ppm	2000/39/EC

			133 mg/m3	
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
		STEL	50 ppm 333 mg/m3	2000/39/EC
		TWA	20 ppm 133 mg/m3	2000/39/EC
n-Butyl acetate	123-86-4	STEL	150 ppm 723 mg/m3	2019/1831/EU
	Further information: Indicative			
		TWA	50 ppm 241 mg/m3	2019/1831/EU
	Further information: Indicative			
		OEL-RL	100 ppm	ZA OEL
	Further information: Occupational Exposure Limits - Restricted Limits For Hazardous Chemical Agents			
		OEL- RL STEL/C	300 ppm	ZA OEL
	Further information: Occupational Exposure Limits - Restricted Limits For Hazardous Chemical Agents			
		STEL	150 ppm 723 mg/m3	2019/1831/EU
		TWA	50 ppm 241 mg/m3	2019/1831/EU

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Routes of exposure	Potential health effects	Value
Ethyl 3-ethoxypropionate	Workers	Skin contact	Long-term systemic effects	102 mg/kg
	Workers	Inhalation	Long-term systemic effects	610 mg/m3
	Workers	Skin contact	Long-term local effects	102 mg/cm2
	Workers	Inhalation	Long-term local effects	610 mg/m3
	Consumers	Skin contact	Long-term systemic effects	24,2 mg/kg
	Consumers	Inhalation	Long-term systemic effects	72,6 mg/m3
	Consumers	Oral	Long-term systemic effects	1,2 mg/kg

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006

Substance name	Environmental Compartment	Value
Ethyl 3-ethoxypropionate	Sewage treatment plant	50 mg/l
	Fresh water	0,061 mg/l
	Sea water	0,006 mg/l
	Fresh water sediment	0,419 mg/kg

	Sea sediment	0,042 mg/kg
	Soil	0,048 mg/kg

8.2 Exposure controls

Engineering measures

Ensure adequate ventilation.

Personal protective equipment

Eye/face protection : Required when there is a risk of eye contact.
Tightly fitting safety goggles (splash goggles) (e.g. EN 166)

Hand protection

Remarks : Wear protective gloves. Any chemical protection glove certified according to EN ISO 374-1 is suitable: e.g.
nitrile gloves - material thickness: 0,35 mm
Further information on penetration time is available from the manufacturer of the glove.
Data are based on information from the glove manufacturer, the raw material manufacturer or according to specifics of the product components.
The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Request information on glove permeation properties from the glove supplier.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Preventive skin protection
Suitable materials for short-term contact (recommended: At least protective index 2, corresponding > 30 minutes of permeation time according to EN ISO 374-1)
Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1):
Suitable materials against splashes (recommended: At least protective index 1, corresponding > 10 minutes of permeation time according to EN ISO 374-1)

Skin and body protection : Personnel should wear antistatic, flame-retardant clothing made of natural fibres and/or heat-resistant synthetic fibres.
chemical-resistant disposable coveralls

Respiratory protection : Suitable respiratory equipment:
half-mask with A2P2 class combination filter
In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Protective measures : Do not breathe vapour/spray.
Eye wash fountains and safety showers must be easily accessible.

Under cool dry conditions, it is possible for the isocyanate to remain unreacted in the paint film for up to 30 hours after application.

Respiratory protective equipment should be worn by spray booth operatives.

Avoid contact with the skin, eyes and clothing.
Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	:	liquid
Form	:	liquid
Color	:	colorless
Odor	:	ester-like
pH	:	substance/mixture reacts with water
Melting point/freezing point	:	not determined
Boiling point/boiling range	:	144,00 - 154,00 °C
Flash point	:	29 °C Method: ISO 3679
Evaporation rate	:	not determined
Flammability	:	Flammable liquid and vapour.
Sustained combustibility	:	Sustains combustibility: yes
Upper explosion limit / Upper flammability limit	:	not determined
Lower explosion limit / Lower flammability limit	:	> 35,0 g/m3
Vapor pressure	:	6,0 hPa (20 °C)

		28,0 hPa (50 °C)
Density	:	0,997 g/cm3 (20 °C)
Solubility(ies)		
Water solubility	:	not determined
Partition coefficient: n-octanol/water	:	not applicable for mixtures
Autoignition temperature	:	> 200 °C
Decomposition temperature	:	No decomposition if stored and handled as prescribed/indicated.
Viscosity		
Viscosity, kinematic	:	7,3 mm2/s (23 °C)
		not determined (40 °C)
Flow time	:	> 30 s at 23 °C Cross section: 3 mm Method: ISO 2431
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

9.2 Other information

Self-heating substances	:	The substance or mixture is not classified as self heating.
Metal corrosion rate	:	Not corrosive to metals.
Particle size	:	The substance / product is marketed or used in a non solid or granular form.

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions	:	Vapours may form ignitable mixture with air.

10.4 Conditions to avoid

Conditions to avoid : Avoid direct contact with water.
Avoid direct sunlight.

Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Keep away from oxidising agents, strongly alkaline and strongly acidic materials, amines, alcohols and water. Uncontrolled exothermic reactions occur with amines and alcohols. The product reacts with water resulting in evolution of carbon dioxide. In closed containers, pressure build up could result in distortion, blowing and in extreme cases bursting of the container.

10.6 Hazardous decomposition products

Nitrogen oxides (NOx)
Hydrogen cyanide (hydrocyanic acid)
Isocyanates

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Harmful if inhaled.

Product:

Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: 19,48 mg/l
Exposure time: 4 h
Test atmosphere: vapor
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 2.000 mg/kg
Method: Calculation method

Components:

2-butoxyethyl acetate:

Acute oral toxicity : LD50 (Rat): 1.880 mg/kg

Acute dermal toxicity : LD50 (Rabbit): 1.500 mg/kg

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Components:

n-Butyl acetate:

Assessment : Repeated exposure may cause skin dryness or cracking.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

May cause respiratory irritation.
May cause drowsiness or dizziness.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration toxicity

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks : Based on the properties of the isocyanate components and considering toxicological data on similar product, this product may cause acute irritation and/or sensitization of the respiratory system leading to an asthmatic condition, wheeziness and tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the occupational exposure limit. Repeated inhalation may lead to a permanent respiratory dis-

ability.

SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

Components:

HDI-Oligomer(Trimer):

Partition coefficient: n-octanol/water	:	log Pow: 9,81 (25 °C)

2-butoxyethyl acetate:

Partition coefficient: n-octanol/water	:	log Pow: 1,51 (25 °C) pH: 7 Method: OECD Test Guideline 107 GLP: no

n-Butyl acetate:

Partition coefficient: n-octanol/water	:	Pow: 200 (25 °C) log Pow: 2,3 (25 °C) pH: 7 Method: OECD Test Guideline 117 GLP: yes

Solvent naphtha (petroleum), light arom.:

Partition coefficient: n-octanol/water	:	log Pow: 3,17 GLP: no

trimethoxy(3-(oxiranylmethoxy)propyl)silane:

Partition coefficient: n-octanol/water	:	log Pow: -0,915

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment	:	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or

very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Product:

Endocrine disrupting potential	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Additional ecological information	:	Avoid release to the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	:	Dispose of isocyanate waste in dry containers and never mix together with other wastes (reaction, dangerous pressure build up). Do not discharge into drains/surface waters/groundwater. Observe national and local legal requirements.
Contaminated packaging	:	Containers which are not properly emptied must be disposed pursuant to Directive 2008/98/EC Residues in empty containers should be neutralised with decontaminant (see section 6). Packaging that is not properly emptied must be disposed of as the unused product.
Waste Code	:	08 01 11, waste paint and varnish containing organic solvents or other hazardous substances

SECTION 14: Transport information

14.1 UN number

UNRTDG	:	UN 1263
IMDG	:	UN 1263
IATA	:	UN 1263

14.2 UN proper shipping name

UNRTDG	:	PAINT
IMDG	:	PAINT
IATA	:	PAINT

14.3 Transport hazard class(es)

		Class	Subsidiary risks
UNRTDG	:	3	
IMDG	:	3	
IATA	:	3	

14.4 Packing group

UNRTDG		
Packing group	:	III
Labels	:	3
IMDG		
Packing group	:	III
Labels	:	3
EmS Code	:	F-E, S-E
IATA (Cargo)		
Packing instruction (cargo aircraft)	:	366
Packing instruction (LQ)	:	Y344
Packing group	:	III
Labels	:	Flammable Liquids
IATA (Passenger)		
Packing instruction (passenger aircraft)	:	355
Packing instruction (LQ)	:	Y344
Packing group	:	III
Labels	:	Flammable liquid

14.5 Environmental hazards

UNRTDG		
Environmentally hazardous	:	no
IMDG		
Marine pollutant	:	no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	:	Conditions of restriction for the following entries should be considered: Number on list 3 Number on list 75
REACH - Candidate List of Substances of Very High Concern for Authorization (Article 59).	:	Not applicable
Regulation (EU) No 2024/590 on substances that deplete the ozone layer	:	Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	:	Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	:	Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	P5c	FLAMMABLE LIQUIDS
	34	Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams),(d) heavy fuel oils (e) alternative fuels serving the same purposes and with similar properties as regards flammability and environmental hazards as the products referred to in points (a) to (d)

Volatile organic compounds	:	Directive 2010/75/EU of 24 November 2010 on industrial and livestock rearing emissions (integrated pollution prevention and control) Volatile organic compounds (VOC) content: 60,39 % Volatile organic compounds (VOC) content: 602,08 g/l VOC content excluding water

Other regulations:

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.
Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.
Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

15.2 Chemical Safety Assessment

Assessment of safe use has been performed for the mixture and the result is documented in section 7 and 8 of the SDS

SECTION 16: Other information

Full text of H-Statements

H226	:	Flammable liquid and vapor.
H302	:	Harmful if swallowed.
H304	:	May be fatal if swallowed and enters airways.
H312	:	Harmful in contact with skin.
H317	:	May cause an allergic skin reaction.
H318	:	Causes serious eye damage.
H332	:	Harmful if inhaled.
H335	:	May cause respiratory irritation.
H336	:	May cause drowsiness or dizziness.
H411	:	Toxic to aquatic life with long lasting effects.
H412	:	Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Asp. Tox.	:	Aspiration hazard
Eye Dam.	:	Serious eye damage
Flam. Liq.	:	Flammable liquids
Skin Sens.	:	Skin sensitization
STOT SE	:	Specific target organ toxicity - single exposure
2000/39/EC	:	Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values
2019/1831/EU	:	Europe. Commission Directive 2019/1831/EU establishing a fifth list of indicative occupational exposure limit values
ZA OEL	:	South Africa. The Regulations for Hazardous Chemical Agents, Occupational Exposure Limits
2000/39/EC / TWA	:	Limit Value - eight hours
2000/39/EC / STEL	:	Short term exposure limit
2019/1831/EU / TWA	:	Limit Value - eight hours
2019/1831/EU / STEL	:	Short term exposure limit
ZA OEL / OEL-RL	:	Occupational Exposure Limit Restricted limit - 8- hour exposure or equivalent (12 hour shifts)
ZA OEL / OEL- RL STEL/C	:	Occupational Exposure Limit Restricted limit - Short term oc-

cupational exposure limits / ceiling limits

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardization; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organization for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Further information

Other information : For multi-pack systems observe material safety data sheets of all components.
Restricted to professional users.

Classification of the mixture:		**Classification procedure:**
Flam. Liq. 3	H226	Based on product data or assessment
Acute Tox. 4	H332	Calculation method
Eye Irrit. 2	H319	Calculation method
Skin Sens. 1	H317	Calculation method
STOT SE 3	H335	Calculation method
STOT SE 3	H336	Calculation method

Asp. Tox. 1	H304	Calculation method
Aquatic Chronic 3	H412	Calculation method

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