

SAFETY DATA SHEET

HM260 HS Matt Clear Coat Hardener



OCTORAL

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

1.1 Product identifier

Product name : HM260 HS Matt Clear Coat Hardener
Product type : Liquid.

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

Not applicable.

1.3 Details of the supplier of the safety data sheet

Valspar b.v.
Zuiveringweg 89
8243 PE Lelystad
The Netherlands
tel: +31 (0)320 292200
fax: +31 (0)320 292201

valspar

e-mail address of person responsible for this SDS : msds@valspar.com

GPS Automotive Lelystad
tel: +31 (0)320 292288
fax: +31 (0)320 292201

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : Argentina +(54)-1159839431
Brazil +(55)-2139581449
Cayman Islands +(1)-345-749-8392
Chile +(56)-225814934
Colombia 01800-710-2151
Costa Rica +(506)-40003869
Mexico 01-800-681-9531
Panama +(507)-8322475
Peru +(51)-17071295
Trinidad and Tobago +(1)-868-224-5716
(Other countries +1 703-741-5970)

Supplier

Telephone number : Call: +31 (0)320 292200 (during daytime)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 3, H226
Acute Tox. 4, H332
Skin Sens. 1, H317
STOT SE 3, H335
STOT SE 3, H336
Asp. Tox. 1, H304
Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Classification according to Directive 1999/45/EC [DPD]

SECTION 2: Hazards identification

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

- Classification** : R10
Xn; R20, R65
Xi; R37
R42/43, R66
R52/53
- Physical/chemical hazards** : Flammable.
- Human health hazards** : Harmful by inhalation. Harmful: may cause lung damage if swallowed. Irritating to respiratory system. May cause sensitisation by inhalation and skin contact. Repeated exposure may cause skin dryness or cracking.
- Environmental hazards** : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

See Section 16 for the full text of the R phrases or H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

- Hazard pictograms** :
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- Signal word** : Danger

- Hazard statements** : Flammable liquid and vapour.
May be fatal if swallowed and enters airways.
May cause an allergic skin reaction.
Harmful if inhaled.
May cause respiratory irritation.
May cause drowsiness or dizziness.
Harmful to aquatic life with long lasting effects.

Precautionary statements

- Prevention** : Wear protective gloves. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Response** : IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.
- Storage** : Store in a well-ventilated place. Keep container tightly closed.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Hazardous ingredients** : Hexamethylene diisocyanate, oligomers
Solvent naphtha (petroleum), heavy arom.
heptan-2-one
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers
- Supplemental label elements** : Contains isocyanates. May produce an allergic reaction.

- Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

Special packaging requirements

- Containers to be fitted with child-resistant fastenings** : Not applicable.
- Tactile warning of danger** : Not applicable.

SECTION 2: Hazards identification**2.3 Other hazards**

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients**3.2 Mixtures** : Mixture

Product/ingredient name	Identifiers	w%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
Aliphatic polyisocyanate	EC: 500-060-2 CAS: 28182-81-2	≥50 - ≤75	Xn; R20 Xi; R37 R42/43	Acute Tox. 4, H332 Skin Sens. 1, H317 STOT SE 3, H335	[1]
Solvent naphtha (petroleum), heavy arom.	REACH #: 01-2119463583-34 EC: 265-198-5 CAS: 64742-94-5	≥10 - ≤18	Xn; R65 R66, R67 N; R51/53	STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	[1]
heptan-2-one	REACH #: 01-2119902391-49 EC: 203-767-1 CAS: 110-43-0 Index: 606-024-00-3	≥10 - ≤18	R10 Xn; R20/22	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H332 STOT SE 3, H336	[1] [2]
Solvent naphtha (petroleum), light arom.	REACH #: 01-2119455851-35 EC: 265-199-0 CAS: 64742-95-6	≤3.7	R10 Xn; R65 Xi; R37 R66, R67 N; R51/53	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	[1]
Aliphatic polyisocyanate 2	REACH #: 01-2119488734-24 EC: 500-125-5 CAS: 53880-05-0	≤5	Xi; R37 R42/43	Skin Sens. 1B, H317 STOT SE 3, H335	[1]
2-butoxyethyl acetate	REACH #: 01-2119475112-47 EC: 203-933-3 CAS: 112-07-2 Index: 607-038-00-2	≤3	Xn; R20/21	Acute Tox. 4, H312 Acute Tox. 4, H332	[1] [2]
1,2,4-trimethylbenzene	REACH #: 01-2119472135-42 EC: 202-436-9 CAS: 95-63-6 Index: 601-043-00-3	≤1.8	R10 Xn; R20 Xi; R36/37/38 N; R51/53	Flam. Liq. 3, H226 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 2, H411	[1] [2]
mesitylene	REACH #: 01-2119463878-19 EC: 203-604-4 CAS: 108-67-8 Index: 601-025-00-5	<1	R10 Xi; R37 N; R51/53	Flam. Liq. 3, H226 STOT SE 3, H335 Aquatic Chronic 2, H411	[1] [2]
cumene	EC: 202-704-5 CAS: 98-82-8	≤0.3	R10 Xn; R65 Xi; R37 N; R51/53	Flam. Liq. 3, H226 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	[1] [2]
naphthalene	EC: 202-049-5 CAS: 91-20-3	≤0.13	Carc. Cat. 3; R40 Xn; R22	Acute Tox. 4, H302 Carc. 2, H351	[1] [2]

SECTION 3: Composition/information on ingredients

xylene	Index: 601-052-00-2 REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≤0.3	N; R50/53 R10 Xn; R20/21 Xi; R38	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304 Flam. Liq. 2, H225	[1] [2]
benzene	REACH #: 01-2119447106-44 EC: 200-753-7 CAS: 71-43-2 Index: 601-020-00-8	<0.1	F; R11 Carc. Cat. 1; R45 Muta. Cat. 2; R46 T; R48/23/24/25 Xn; R65 Xi; R36/38 See Section 16 for the full text of the R-phrases declared above.	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304 Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Muta. 1B, H340 Carc. 1A, H350 STOT RE 1, H372 Asp. Tox. 1, H304 See Section 16 for the full text of the H statements declared above.	[1] [2]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
- Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

SECTION 4: First aid measures

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Based on the properties of the isocyanate components and considering toxicological data on similar mixtures, this mixture may cause acute irritation and/or sensitisation of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest. Sensitised persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability. Repeated or prolonged contact with irritants may cause dermatitis.

Contains Hexamethylene diisocyanate, oligomers, 3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers. May produce an allergic reaction.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.

See toxicological information (Section 11)

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Recommended: alcohol-resistant foam, CO₂, powders, water spray or mist.
- Unsuitable extinguishing media** : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen, hydrogen cyanide, monomeric isocyanates.

5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.
- Special protective equipment for fire-fighters** : Appropriate breathing apparatus may be required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions : Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up : Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Place in a suitable container. The contaminated area should be cleaned immediately with a suitable decontaminant. One possible (flammable) decontaminant comprises (by volume): water (45 parts), ethanol or isopropyl alcohol (50 parts) and concentrated (d: 0,880) ammonia solution (5 parts). A non-flammable alternative is sodium carbonate (5 parts) and water (95 parts). Add the same decontaminant to the remnants and let stand for several days until no further reaction in an unsealed container. Once this stage is reached, close container and dispose of according to local regulations (see section 13).

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used.

Examination of lung function should be carried out on a regular basis on persons spraying this mixture.

7.1 Precautions for safe handling : Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing and floors should be of the conducting type. Care should be taken when re-opening partly-used containers. Precautions should be taken to minimise exposure to atmospheric humidity or water. CO₂ will be formed, which, in closed containers, could result in pressurisation. Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel. Always keep in containers made from the same material as the original one. Comply with the health and safety at work laws. Do not allow to enter drains or watercourses.

Information on fire and explosion protection

SECTION 7: Handling and storage

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight.

Keep container tightly closed.

Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
heptan-2-one	EU OEL (Europe, 6/2019). Absorbed through skin. Notes: list of indicative occupational exposure limit values STEL: 475 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 238 mg/m ³ 8 hours. TWA: 50 ppm 8 hours.
2-butoxyethyl acetate	EU OEL (Europe, 6/2019). Absorbed through skin. Notes: list of indicative occupational exposure limit values STEL: 333 mg/m ³ 15 minutes. STEL: 50 ppm 15 minutes. TWA: 133 mg/m ³ 8 hours. TWA: 20 ppm 8 hours.
1,2,4-trimethylbenzene	EU OEL (Europe, 6/2019). Notes: list of indicative occupational exposure limit values TWA: 100 mg/m ³ 8 hours. TWA: 20 ppm 8 hours.
mesitylene	EU OEL (Europe, 6/2019). Notes: list of indicative occupational exposure limit values TWA: 100 mg/m ³ 8 hours. TWA: 20 ppm 8 hours.
cumene	EU OEL (Europe, 6/2019). Absorbed through skin. Notes: list of indicative occupational exposure limit values STEL: 250 mg/m ³ 15 minutes. STEL: 50 ppm 15 minutes.

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naphthalene	TWA: 100 mg/m ³ 8 hours. TWA: 20 ppm 8 hours. EU OEL (Europe, 6/2019). Notes: list of indicative occupational exposure limit values
xylene	TWA: 50 mg/m ³ 8 hours. TWA: 10 ppm 8 hours. EU OEL (Europe, 6/2019). Absorbed through skin. Notes: list of indicative occupational exposure limit values
benzene	STEL: 442 mg/m ³ , 0 times per shift, 15 minutes. STEL: 100 ppm, 0 times per shift, 15 minutes. TWA: 221 mg/m ³ , 0 times per shift, 8 hours. TWA: 50 ppm, 0 times per shift, 8 hours. EU OEL (Europe, 6/2019). Absorbed through skin. TWA: 3.25 mg/m ³ 8 hours. TWA: 1 ppm 8 hours.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
Aliphatic polyisocyanate	DNEL	Long term Inhalation	0.5 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	1 mg/m ³	Workers	Local
Solvent naphtha (petroleum), heavy arom.	DNEL	Long term Inhalation	150 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	12.5 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	32 mg/m ³	General population [Consumers]	Systemic
	DNEL	Long term Dermal	7.5 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	7.5 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	2.1 mg/kg bw/day	General population	Systemic
	DMEL	Long term Inhalation	3.25 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	10.2 mg/m ³	General population	Systemic
	DMEL	Long term Dermal	23.4 mg/kg bw/day	Workers	Systemic
	DMEL	Long term Dermal	42.4 mg/kg bw/day	General population	Systemic
heptan-2-one	DNEL	Long term Oral	23.32 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	23.32 mg/kg bw/day	General	Systemic

SECTION 8: Exposure controls/personal protection

Solvent naphtha (petroleum), light arom.	DNEL	Long term Dermal	kg bw/day 54.27 mg/kg bw/day	population Workers	Systemic
	DNEL	Long term Inhalation	84.31 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	394.25 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	1516 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	150 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	25 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	32 mg/m ³	General population [Consumers]	Systemic
	DNEL	Long term Dermal	11 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	11 mg/kg bw/day	General population [Consumers]	Systemic
Aliphatic polyisocyanate 2	DNEL	Long term Inhalation	0.3 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	0.6 mg/m ³	Workers	Local
2-butoxyethyl acetate	DNEL	Long term Inhalation	133 mg/m ³	Workers	Systemic
	DNEL	Long term Oral	8.6 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	36 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	72 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	80 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	102 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	120 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	169 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	200 mg/m ³	General population	Local
1,2,4-trimethylbenzene	DNEL	Short term Inhalation	333 mg/m ³	Workers	Local
	DNEL	Long term Oral	15 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	29.4 mg/m ³	General population	Local
	DNEL	Long term Inhalation	29.4 mg/m ³	General population	Local
	DNEL	Short term Inhalation	29.4 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	29.4 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	100 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	100 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	100 mg/m ³	Workers	Systemic
DNEL	Long term Inhalation	100 mg/m ³	Workers	Systemic	

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mesitylene	DNEL	Inhalation	9512 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	16171 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Oral	15 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	29.4 mg/m ³	General population	Local
	DNEL	Long term Inhalation	29.4 mg/m ³	General population	Local
	DNEL	Short term Inhalation	29.4 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	29.4 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	100 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	100 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	100 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	100 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	9512 mg/kg bw/day	General population	Systemic
cumene	DNEL	Long term Dermal	16171 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	1.2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	15.4 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	16.6 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	100 mg/m ³	Workers	Systemic
naphthalene	DNEL	Short term Inhalation	250 mg/m ³	Workers	Local
	DNEL	Long term Dermal	3.57 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	25 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	25 mg/m ³	Workers	Systemic
xylene	DNEL	Long term Inhalation	221 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	442 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	221 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	442 mg/m ³	Workers	Local
	DNEL	Long term Dermal	212 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	65.3 mg/m ³	General population [Consumers]	Systemic
	DNEL	Short term Inhalation	260 mg/m ³	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	65.3 mg/m ³	General population	Local

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benzene	DNEL	Short term Inhalation	260 mg/m ³	[Consumers] General population	Local
	DNEL	Long term Dermal	125 mg/kg bw/day	[Consumers] General population	Systemic
	DNEL	Long term Oral	12.5 mg/kg bw/day	[Consumers] General population	Systemic
	DNEL	Long term Oral	1.6 mg/kg bw/day	[Consumers] General population	Systemic
	DNEL	Long term Inhalation	14.8 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	77 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	108 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	289 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	289 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	1.9 mg/m ³	Workers	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
Aliphatic polyisocyanate	Fresh water	0.127 mg/l	-
	Marine water	0.0127 mg/l	-
	Fresh water sediment	266700 mg/kg dwt	-
	Marine water sediment	26670 mg/kg dwt	-
	Sewage Treatment Plant	38.28 mg/l	-
	Soil	53182 mg/kg dwt	-
heptan-2-one	Fresh water	0.0982 mg/l	-
	Marine water	0.00982 mg/l	-
	Sewage Treatment Plant	12.5 mg/l	-
	Fresh water sediment	1.89 mg/kg dwt	-
	Marine water sediment	0.189 mg/kg dwt	-
	Soil	0.321 mg/kg dwt	-
2-butoxyethyl acetate	Fresh water	0.304 mg/l	-
	Marine water	0.0304 mg/l	-
	Sewage Treatment Plant	90 mg/l	-
	Fresh water sediment	2.03 mg/kg dwt	-
	Marine water sediment	0.203 mg/kg dwt	-
	Soil	0.415 mg/kg dwt	-
1,2,4-trimethylbenzene	Secondary Poisoning	60 mg/kg	-
	Fresh water	0.12 mg/l	-
	Marine water	0.12 mg/l	-
	Sewage Treatment Plant	2.41 mg/l	-
	Fresh water sediment	13.56 mg/kg dwt	-
	Marine water sediment	13.56 mg/kg dwt	-
mesitylene	Soil	2.34 mg/kg dwt	-
	Fresh water	0.101 mg/l	-
	Marine water	0.101 mg/l	-
	Sewage Treatment Plant	2.02 mg/l	-
	Fresh water sediment	13.56 mg/kg dwt	-
	Marine water sediment	13.56 mg/kg dwt	-

SECTION 8: Exposure controls/personal protection

cumene	Fresh water sediment	7.86 mg/kg dwt	-
	Marine water sediment	7.86 mg/kg dwt	-
	Soil	1.34 mg/kg dwt	-
	Fresh water	0.035 mg/l	-
	Marine water	0.004 mg/l	-
	Sewage Treatment Plant	200 mg/l	-
naphthalene	Fresh water sediment	3.22 mg/kg dwt	-
	Marine water sediment	0.322 mg/kg dwt	-
	Soil	0.624 mg/kg dwt	-
	Fresh water	2.4 µg/l	-
	Marine water	2.4 µg/l	-
	Sewage Treatment Plant	2.9 mg/l	-
xylene	Fresh water sediment	67.2 µg/kg dwt	-
	Marine water sediment	67.2 µg/kg dwt	-
	Soil	53.3 µg/kg dwt	-
	Fresh water	0.327 mg/l	-
	Marine water	0.327 mg/l	-
	Sewage Treatment Plant	6.58 mg/l	-
benzene	Fresh water sediment	12.46 mg/kg dwt	-
	Marine water sediment	12.46 mg/kg dwt	-
	Soil	2.31 mg/kg dwt	-
	Fresh water	1.9 mg/l	Sensitivity Distribution
	Marine water	1.9 mg/l	Sensitivity Distribution
	Sewage Treatment Plant	39 mg/l	Sensitivity Distribution
	Fresh water sediment	33 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	33 mg/kg dwt	Equilibrium Partitioning
	Soil	4.8 mg/kg dwt	Equilibrium Partitioning

8.2 Exposure controls

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be exposed to any process in which this product is used.

Examination of lung function should be carried out on a regular basis on persons spraying this mixture.

Appropriate engineering controls : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. Air-fed protective respiratory equipment must be worn by the spray operator, even when good ventilation is provided. In other operations, if local exhaust ventilation and good general extraction are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn. (See Occupational exposure controls.)

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. Recommended: If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

SECTION 8: Exposure controls/personal protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): Recommended EN 374 Viton® \geq 0.7 mm
 < 1 hour (breakthrough time): Conditionally suitable materials for protective gloves; EN 374: Nitrile rubber - NBR (\geq 0.35 mm). Only suitable as splash protection. Only suitable for brief exposure. In the event of contamination, change protective gloves immediately.
 There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.
 The breakthrough time must be greater than the end use time of the product.
 The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.
 Gloves should be replaced regularly and if there is any sign of damage to the glove material.
 Always ensure that gloves are free from defects and that they are stored and used correctly.
 The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.
 Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods. Recommended: Cotton or cotton/synthetic overalls or coveralls are normally suitable.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: full-face mask supplied-air respirator
- Environmental exposure controls** : Do not allow to enter drains or watercourses.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Liquid.
- Colour** : Colourless.
- Odour** : Not available.
- Odour threshold** : Not available.
- pH** : Not applicable.
- Melting point/freezing point** : Not available.
- Initial boiling point and boiling range** : $>100^{\circ}\text{C}$
- Flash point** : Closed cup: 27°C
- Evaporation rate** : Not available.

SECTION 9: Physical and chemical properties

Upper/lower flammability or explosive limits	: Not available.
Vapour pressure	: Not available.
Vapour density	: Not available.
Relative density	: 1.028
Solubility(ies)	: Insoluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/ water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C): 0.06 cm ² /s
Explosive properties	: Not available.
Oxidising properties	: Not available.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: Stable under recommended storage and handling conditions (see Section 7).
10.3 Possibility of hazardous reactions	: In closed containers, pressure build-up could result in distortion, expansion and, in extreme cases, bursting of the container.
10.4 Conditions to avoid	: In a fire, hazardous decomposition products may be produced.
10.5 Incompatible materials	: Keep away from: oxidising agents, strong alkalis, strong acids, amines, alcohols, water. Uncontrolled exothermic reactions occur with amines and alcohols.
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information**11.1 Information on toxicological effects**

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Based on the properties of the isocyanate components and considering toxicological data on similar mixtures, this mixture may cause acute irritation and/or sensitisation of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest. Sensitised persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability.

SECTION 11: Toxicological information

Repeated or prolonged contact with irritants may cause dermatitis.

Contains Hexamethylene diisocyanate, oligomers, 3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers. May produce an allergic reaction.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Aliphatic polyisocyanate	LC50 Inhalation Dusts and mists	Rat	2.18 mg/l	4 hours
	LD50 Dermal	Rabbit - Male, Female	>2000 mg/kg	-
	LD50 Dermal	Rat - Male, Female	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Solvent naphtha (petroleum), heavy arom.	LC50 Inhalation Dusts and mists	Rat	>4688 mg/m ³	4 hours
	LD50 Dermal	Rabbit	>2000 mg/kg	-
heptan-2-one	LD50 Oral	Rat	>5000 mg/kg	-
	LC50 Inhalation Vapour	Rat	16.8 mg/l	4 hours
Solvent naphtha (petroleum), light arom.	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	1600 mg/kg	-
	LC50 Inhalation Vapour	Rat	>6193 mg/m ³	4 hours
	LD50 Dermal	Rabbit	>3160 mg/kg	-
Aliphatic polyisocyanate 2	LD50 Oral	Rat	3592 mg/kg	-
	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours
2-butoxyethyl acetate	LD50 Oral	Rat	>14000 mg/kg	-
	LD50 Dermal	Rabbit	1500 mg/kg	-
1,2,4-trimethylbenzene cumene	LD50 Oral	Rat	1880 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
	LC50 Inhalation Vapour	Rat	39000 mg/m ³	4 hours
	LD50 Oral	Rat	1400 mg/kg	-
naphthalene xylene	LD50 Dermal	Rat	>2500 mg/kg	-
	LC50 Inhalation Gas.	Rat	6350 ppm	4 hours
	LD50 Dermal	Rabbit	12126 mg/kg	-
benzene	LD50 Oral	Rat	3523 to 4000 mg/kg	-
	LC50 Inhalation Gas.	Rat	>10000 ppm	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>3000 mg/kg	-

Conclusion/Summary : Not available.

Acute toxicity estimates

Route	ATE value
Oral	13909.78 mg/kg
Dermal	71684.59 mg/kg
Inhalation (vapours)	15.71 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Aliphatic polyisocyanate	Skin - Mild irritant	Rabbit	-	4 hours	-
	Eyes - Mild irritant	Rabbit	-	-	-
Solvent naphtha (petroleum), heavy arom.	Skin - Mild irritant	Rabbit	-	24 hours 500 microliters	-
				24 hours 14 milligrams	-
heptan-2-one	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
				24 hours 500 milligrams	-
2-butoxyethyl acetate	Eyes - Mild irritant	Rabbit	-	500 milligrams	-
				500 milligrams	-

SECTION 11: Toxicological information

mesitylene	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
cumene	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Mild irritant Skin - Mild irritant	Rabbit Rabbit	- -	86 milligrams 24 hours 10 milligrams	- -
naphthalene	Skin - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Skin - Mild irritant	Rabbit	-	495 milligrams	-
xylene	Skin - Severe irritant	Rabbit	-	24 hours 0.05 Milliliters	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
benzene	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Moderate irritant	Rabbit	-	100 Percent	-
	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	88 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
benzene	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-

Conclusion/Summary : Not available.

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
Aliphatic polyisocyanate	skin	Mouse	Sensitising
	skin	Guinea pig	Sensitising

Conclusion/Summary : Not available.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
Aliphatic polyisocyanate	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria Metabolic activation: +/-	Negative
	OECD 476 In vitro Mammalian Cell Gene Mutation Test	Experiment: In vitro Subject: Mammalian-Animal Metabolic activation: +/-	Negative

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

SECTION 11: Toxicological information

Product/ingredient name	Category	Route of exposure	Target organs
Aliphatic polyisocyanate	Category 3	-	Respiratory tract irritation
Solvent naphtha (petroleum), heavy arom. heptan-2-one	Category 3	-	Narcotic effects
Solvent naphtha (petroleum), light arom.	Category 3	-	Narcotic effects
	Category 3	-	Respiratory tract irritation
Aliphatic polyisocyanate 2	Category 3	-	Narcotic effects
	Category 3	-	Respiratory tract irritation
1,2,4-trimethylbenzene	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Product/ingredient name	Result
Solvent naphtha (petroleum), heavy arom.	ASPIRATION HAZARD - Category 1
Solvent naphtha (petroleum), light arom.	ASPIRATION HAZARD - Category 1

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself.
Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

Product/ingredient name	Result	Species	Exposure
Aliphatic polyisocyanate	Acute EC50 >1000 mg/l	Algae - Scenedesmus subspicatus	72 hours
Solvent naphtha (petroleum), heavy arom.	Acute EC50 >100 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 >100 mg/l	Fish - Danio rerio	96 hours
heptan-2-one	Acute EC50 11 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 3 to 10 mg/l	Daphnia - Daphnia magna	48 hours
Solvent naphtha (petroleum), light arom.	Acute LC50 2 to 5 mg/l	Fish - Oncorhynchus mykiss	96 hours
	Acute LC50 131000 to 137000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Aliphatic polyisocyanate 2	Acute EC50 2.9 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 3.2 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 9.2 mg/l	Fish - Oncorhynchus mykiss	96 hours
	Acute NOEC >1 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
2-butoxyethyl acetate	Acute EC50 >100 mg/l	Daphnia	48 hours
	Acute EC50 >100 mg/l	Fish	96 hours
1,2,4-trimethylbenzene cumene	Acute EC50 1570 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 37 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 22 mg/l	Fish - Pimephales promelas	96 hours
	Acute EC50 1 to 10 mg/l	Fish	96 hours
1,2,4-trimethylbenzene cumene	Acute EC50 2600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 7400 to 11290 µg/l Fresh water	Crustaceans - Artemia sp. - Nauplii	48 hours

SECTION 12: Ecological information

naphthalene	Acute EC50 10600 to 14100 µg/l Fresh water Acute LC50 2700 µg/l Fresh water Acute EC50 1.96 mg/l Fresh water Acute LC50 2350 µg/l Marine water	Daphnia - Daphnia magna - Neonate Fish - Oncorhynchus mykiss Daphnia - Daphnia magna Crustaceans - Palaemonetes pugio	48 hours 96 hours 48 hours 48 hours
xylene	Acute LC50 213 µg/l Fresh water	Fish - Melanotaenia fluviatilis - Larvae Algae	96 hours 72 hours
benzene	Acute EC50 1 to 10 mg/l Acute EC50 1 to 10 mg/l Acute LC50 1 to 10 mg/l EC50 >300 mg/l	Daphnia - Daphnia magna Fish Daphnia	48 hours 96 hours 48 hours

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Aliphatic polyisocyanate	EU 67/548/EEC ANNEX V, C.4.E.	1 % - Not readily - 28 days	-	-
Solvent naphtha (petroleum), heavy arom.	-	50 % - Readily - 28 days	-	Fresh water
heptan-2-one	-	69 % - Readily - 28 days	-	-
Solvent naphtha (petroleum), light arom.	-	78 % - Readily - 28 days	-	Fresh water
Aliphatic polyisocyanate 2	OECD 302C Inherent Biodegradability: Modified MITI Test (II)	5 % - 28 days	-	-
	OECD 301F Ready Biodegradability - Manometric Respirometry Test	1 % - 28 days	-	-

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Aliphatic polyisocyanate	Fresh water 7.7 days, 23°C	-	Not readily
Solvent naphtha (petroleum), heavy arom.	-	-	Readily
heptan-2-one	-	-	Readily
Solvent naphtha (petroleum), light arom.	-	-	Readily
Aliphatic polyisocyanate 2	-	-	Not readily
2-butoxyethyl acetate	-	90.4%; 28 day(s)	-

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Aliphatic polyisocyanate	5.54	367.7	low
Solvent naphtha (petroleum), heavy arom.	2.8 to 6.5	99 to 5780	high
heptan-2-one	2.26	-	low
Solvent naphtha (petroleum), light arom.	-	10 to 2500	high
2-butoxyethyl acetate	1.51	-	low
1,2,4-trimethylbenzene	3.63	243	low
mesitylene	3.42	161	low
cumene	3.55	35.48	low

SECTION 12: Ecological information

naphthalene	3.4	36.5 to 168	low
xylene	3.12	8.1 to 25.9	low
benzene	2.13	11	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

Disposal considerations : Do not allow to enter drains or watercourses. Residues in empty containers should be neutralised with a decontaminant (see section 6).
Dispose of according to all federal, state and local applicable regulations.
If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.
For further information, contact your local waste authority.

European waste catalogue (EWC)

The European Waste Catalogue classification of this product, when disposed of as waste, is:

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.





Disposal considerations : Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers.
Empty containers must be scrapped or reconditioned.
Dispose of containers contaminated by the product in accordance with local or national legal provisions.

Type of packaging	European waste catalogue (EWC)
CEPE Paint Guidelines	15 01 10* packaging containing residues of or contaminated by hazardous substances

SECTION 13: Disposal considerations

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	Paint related material
14.3 Transport hazard class(es)	3 	3 	3 	3 
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	No.	Yes.	No.	No.
Additional information	Hazard identification number 30 Limited quantity 5 L Special provisions 163, 640E, 650, 367 Tunnel code (D/E)	The product is only regulated as an environmentally hazardous substance when transported in tank vessels. Special provisions 163, 367, 640E, 650	Emergency schedules F-E, _S-E_ Special provisions 163, 223, 367, 955	Quantity limitation Passenger and Cargo Aircraft: 60 L. Packaging instructions: 355. Cargo Aircraft Only: 220 L. Packaging instructions: 366. Limited Quantities - Passenger Aircraft: 10 L. Packaging instructions: Y344. Special provisions A3, A72, A192

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments : Not applicable.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU Regulation (EC) No. 1907/2006 (REACH)****Annex XIV - List of substances subject to authorisation****Annex XIV**

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Other EU regulations

VOC : The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.

Europe inventory : All components are listed or exempted.

Black List Chemicals (76/464/EEC) :

Product/ingredient name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
naphthalene	Not supported	-	-	-
benzene	Not supported	Not supported	-	-

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Seveso Directive

This product may add to the calculation for determining whether a site is within the scope of the Seveso Directive on major accident hazards.

Industrial use : The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

International regulations**Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Ingredient name	List name	Status
naphthalene	POPs - Annex 3	Listed

International lists

SECTION 15: Regulatory information

National inventory

Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Japan	: Japan inventory (ENCS) : Not determined. Japan inventory (ISHL) : Not determined.
Malaysia	: Not determined
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
Turkey	: All components are listed or exempted.
United States	: All components are active or exempted.

15.2 Chemical safety assessment : No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

CEPE code : 5

Indicates information that has changed from previously issued version.

Abbreviations and acronyms :

- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number
- vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Acute Tox. 4, H332	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

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
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.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated

SECTION 16: Other information

H373	exposure. May cause damage to organs through prolonged or repeated exposure.
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.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

[Full text of classifications \[CLP/GHS\]](#)

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Carc. 1A	CARCINOGENICITY - Category 1A
Carc. 2	CARCINOGENICITY - Category 2
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Muta. 1B	GERM CELL MUTAGENICITY - Category 1B
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1B	SKIN SENSITISATION - Category 1B
STOT RE 1	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

[Full text of abbreviated R phrases](#)

R11- Highly flammable.
R10- Flammable.
R45- May cause cancer.
R40- Limited evidence of a carcinogenic effect.
R46- May cause heritable genetic damage.
R48/23/24/25- Also toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
R20- Also harmful by inhalation.
R22- Also harmful if swallowed.
R20/21- Also harmful by inhalation and in contact with skin.
R20/22- Also harmful by inhalation and if swallowed.
R65- Also harmful: may cause lung damage if swallowed.
R37- Irritating to respiratory system.
R38- Irritating to skin.
R36/38- Irritating to eyes and skin.
R36/37/38- Irritating to eyes, respiratory system and skin.
R42/43- May cause sensitisation by inhalation and skin contact.
R66- Repeated exposure may cause skin dryness or cracking.
R67- Vapours may cause drowsiness and dizziness.
R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

[Full text of classifications \[DSD/DPD\]](#)

SECTION 16: Other information

F - Highly flammable

Carc. Cat. 1 - Carcinogen category 1

Carc. Cat. 3 - Carcinogen category 3

Muta. Cat. 2 - Mutagen category 2

T - Toxic

Xn - Harmful

Xi - Irritant

N - Dangerous for the environment

Date of printing : 2/1/2021

Date of issue/ Date of revision : 2/1/2021

Date of previous issue : 12/8/2020

Version : 1

Notice to reader

The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.