SAFETY DATA SHEET

Dacfill PU Basecoat

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

1.1 Product identifier

Product name : Dacfill PU Basecoat

Product description : Coating.

Product type : Liquid.

UFI : 9G21-H0QU-V00D-TEC0

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

Identified uses
Industrial Professional

Uses advised against	Reason
Consumer	Product is not intended for consumer use.

1.3 Details of the supplier of the safety data sheet

RUST-OLEUM EUROPE
Martin Mathys NV, Kolenbergstraat 23, B-3545 Zelem, Belgium
Telephone no.: +32 (0) 13 460 200
Fax no.: +32 (0) 13 460 201

Tor Coatings Limited
Unit 21, White Rose Way, Follingsby Park, Gateshead, Tyne & Wear, NE10 8YX United Kingdom
Telephone no.: +44 (0) 191 4106611
Fax no.: +44 (0) 191 4920125
enquiries@tor-coatings.com

e-mail address of person responsible for this SDS : rpmeurohas@rustoleum.eu

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number Belgium	: Poison centre: +32(0)70 245 245
Telephone number Bulgaria	: +359 2 9154 409
Telephone number Croatia	: +385 1 2348 342
Telephone number Cyprus	: 1401
Telephone number Czech Republic	: Toxikologické informační středisko: Na Bojišti 1, 120 00 Praha 2, tel. +420 224 919 293 nebo +420 224 915 402 (nepřetržitá lékařská služba).
Telephone number Denmark	: Contact the "Giftlinien" on tel. No. 82 12 12 12 (open 24 hours a day). See point 4 on first aid.
Telephone number Estonia	: 16662
Telephone number Finland	: 0800 147 111
Telephone number France	: ORFILA (INRS): +33 (0)1 45 42 59 59 (24/7)
Telephone number Greece	: Emergency Telephone Poison Center Nos. Children Aglaia Kyriakou +30 210 7793777

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

Telephone number Hungary	:	Health Toxicology Information Service (ETTSZ) (+ 36-80) 201-199 (in case of emergency 0-24 h, can be called free of charge).
Telephone number Iceland	:	+354 5432222
Telephone number Ireland	:	809 2166 Available 8am to 10pm 7 days per week
Telephone number Italy	:	800183459
Telephone number Latvia	:	Toxicology and sepsis clinics Poisoning and Drug Information Center, Hipokrāta Street 2, Riga, Latvia, LV-1038, Phone number: +371 67042473
Telephone number Lithuania	:	Poison Information Office 24 hours a day: Phone: +370 (5) 2362052 (www.apsinuodijau.lt/)
Telephone number Luxembourg	:	Poison centre: +32(0)70 245 245
Telephone number Malta	:	112
Telephone number Netherlands	:	088-755 8000
Telephone number Norway	:	+47 22 59 13 00
Telephone number Portugal	:	112 24/7, free call 800 250 250
Telephone number Romania	:	+40 21 318 36 06 (Monday - Friday between 8:00 -15:00, local hour)
Telephone number Slovakia	:	NATIONAL TOXICOLOGICAL INFORMATION CENTER - Non-stop 24-hour consultation in case of acute intoxication +421 2 5477 4166
Telephone number Spain	:	915 620 420
Telephone number Sweden	:	Poison Information Center: 112
Telephone number Switzerland	:	Swiss Toxicological Information Centre (24 h) : 145
Telephone number United Kingdom: Northern Ireland	:	809 2166 Available 8am to 10pm 7 days per week

Supplier

Telephone number Austria	:	+43 13649237
Telephone number Belgium	:	+32 28083237
Telephone number Bulgaria	:	+359 32570104
Telephone number Croatia	:	+385 17776920
Telephone number Czech Republic	:	+420 228880039
Telephone number Denmark	:	+45 69918573
Telephone number Estonia	:	+372 6681294
Telephone number Finland	:	+358 942419014
Telephone number France	:	+33 975181407
Telephone number Germany	:	+49 69643508409 / 0800-181-7059
Telephone number Greece	:	+30 2111768478
Telephone number Hungary	:	+36 18088425
Telephone number Iceland	:	+354 539 0655
Telephone number Ireland	:	+353 19014670
Telephone number Italy	:	+39 0245557031 / 800-789-767
Telephone number Latvia	:	+371 66165504
Telephone number Lithuania	:	+370 52140238
Telephone number Luxembourg	:	352-20202416
Telephone number Netherlands	:	+31 858880596
Telephone number Poland	:	+48 223988029
Telephone number Portugal	:	+351 308801773

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

Telephone number Romania	:	+40 37 6300026
Telephone number Slovakia	:	+421 233057972
Telephone number Slovenia	:	+38 618888016
Telephone number Spain	:	+34 931768545
Telephone number Sweden	:	+46 852503403
Telephone number Switzerland	:	+41 435082011
Hours of operation	:	24 / 7

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]

Skin Sens. 1, H317
Aquatic Chronic 3, H412

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

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

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

2.2 Label elements

Hazard pictograms :

Signal word : Warning

Hazard statements : H317 - May cause an allergic skin reaction.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

General : Not applicable.

Prevention : P280 - Wear protective gloves.
P284 - In case of inadequate ventilation wear respiratory protection.

Response : P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Storage : Not applicable.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients : 1,6-hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate
hexamethylene-1,6-diisocyanate oligomer (type uretdione)
polyhexamethylene diisocyanate
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers

Supplemental label elements : EUH204 - Contains isocyanates. May produce an allergic reaction.

Supplemental label elements : Detergents - Regulation (EC) No 907/2006 : Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : **As from August 24 2023 adequate training is required before industrial or professional use.**

SECTION 2: Hazards identification

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Europe

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
1,6-hexanediyl-bis(2-(2-(1-ethylpentyl) -3-oxazolidinyl)ethyl) carbamate	EC: 411-700-4 CAS: 140921-24-0 Index: 616-079-00-5	≤10	Skin Sens. 1, H317	-	[1]
Solvent naphtha (petroleum), light arom.	REACH #: 01-2119455851-35 EC: 265-199-0 CAS: 64742-95-6 Index: 649-356-00-4	≤6,5	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	-	[1]
propylene carbonate	EC: 203-572-1 CAS: 108-32-7 Index: 607-194-00-1	≤5	Eye Irrit. 2, H319	-	[1]
reaction mass of 2-ethylhexyl(3-isocyanato-4-methylphenyl)carbamate and 2-ethylhexyl (5-isocyanato-2-methylphenyl)carbamate and 2-ethylhexyl (3-isocyanato-2-methylphenyl)carbamate	REACH #: 01-2120800690-65 List #: 946-383-6	<3	Eye Irrit. 2, H319 Skin Sens. 1B, H317 Repr. 2, H361fd Aquatic Chronic 4, H413	-	[1]
hexamethylene-1,6-diisocyanate oligomer (type uretdione)	REACH #: 01-2119488177-26 CAS: 28182-81-2 List #: 931-288-4	≤3	Acute Tox. 3, H331 Skin Sens. 1, H317 STOT SE 3, H335	ATE [Inhalation (dusts and mists)] = 0,5 mg/l	[1]
polyhexamethylene diisocyanate	REACH #: 01-2119485796-17 CAS: 28182-81-2 List #: 931-274-8	≤3	Acute Tox. 4, H332 Skin Sens. 1, H317 STOT SE 3, H335	ATE [Inhalation (dusts and mists)] = 1,5 mg/l	[1]
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	REACH #: 01-2119488734-24 EC: 500-125-5	≤3	Skin Sens. 1B, H317 STOT SE 3, H335	-	[1]

SECTION 3: Composition/information on ingredients

	CAS: 53880-05-0				
(bis(isopropyl)naphthalene)	REACH #: 01-2119565150-48 EC: 254-052-6 CAS: 38640-62-9	≤1,8	Asp. Tox. 1, H304 Aquatic Chronic 1, H410	M [Chronic] = 1	[1]
hydrocarbons, aromatic, C9	REACH #: 01-2119455851-35 EC: 918-668-5	<1	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	-	[1]
2-ethylhexanal	EC: 204-596-5 CAS: 123-05-7	≤0,3	Flam. Liq. 3, H226 Skin Sens. 1B, H317 Repr. 2, H361	-	[1]
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	EC: 223-861-6 CAS: 4098-71-9 Index: 615-008-00-5	≤0,1	Acute Tox. 1, H330 Skin Corr. 1C, H314 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Chronic 2, H411 **See Section 16 for the full text of the H statements declared above.**	ATE [Inhalation (dusts and mists)] = 0,031 mg/l Resp. Sens. 1, H334: C ≥ 0,5% Skin Sens. 1, H317: C ≥ 0,5%	[1]

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.

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

Type

[1] Substance classified with a health or environmental hazard

List numbers have no legal significance.

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.

SECTION 4: First aid measures

Skin contact : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. 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

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
redness

Ingestion : No specific data.

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.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.In case of fire, use water spray (fog), foam, dry chemical or CO_2.

Unsuitable extinguishing media : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
halogenated compounds
metal oxide/oxides

5.3 Advice for firefighters

SECTION 5: Firefighting measures

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Additional information : No unusual hazard if involved in a fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and material for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. 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.

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.

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

SECTION 7: Handling and storage

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

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 / Biological exposure indices

Recommended monitoring procedures : 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
Solvent naphtha (petroleum), light arom.	DNEL	Long term Dermal	25 mg/kg	Workers	Systemic
	DNEL	Long term Inhalation	150 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	11 mg/kg	General population	Systemic
	DNEL	Long term Inhalation	32 mg/m³	General population	Systemic
	DNEL	Long term Oral	11 mg/kg	General population	Systemic
hexamethylene-1,6-diisocyanate oligomer (type uretdione)	DNEL	Short term Inhalation	0,7 mg/m³	Workers	Local
	DNEL	Long term Inhalation	0,35 mg/m³	Workers	Local
polyhexamethylene diisocyanate	DNEL	Short term Inhalation	1 mg/m³	Workers	Local
	DNEL	Long term Inhalation	0,5 mg/m³	Workers	Local
(bis(isopropyl)naphthalene)	DNEL	Long term Oral	2,1 mg/kg bw/day	General population [Consumers]	Systemic

SECTION 8: Exposure controls/personal protection

	DNEL	Long term Dermal	2,1 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	7,4 mg/m³	General population [Consumers]	Systemic
	DNEL	Long term Dermal	4,3 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	30 mg/m³	Workers	Systemic
hydrocarbons, aromatic, C9	DNEL	Long term Inhalation	150 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	25 mg/kg	Workers	Systemic
	DNEL	Long term Dermal	11 mg/kg	General population	Systemic
	DNEL	Long term Inhalation	32 mg/m³	General population	Systemic
	DNEL	Long term Oral	11 mg/kg	General population	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
hexamethylene-1,6-diisocyanate oligomer (type uretdione)	Fresh water	>0,05 mg/l	-
	Marine	>0,005 mg/l	-
	Fresh water sediment	>1,33 mg/kg dwt	-
	Marine water sediment	>0,133 mg/kg dwt	-
	Soil	>0,066 mg/kg dwt	-
	Sewage Treatment Plant	55,6 mg/l	-
polyhexamethylene diisocyanate	Fresh water	0,127 mg/l	-
	Marine	0,0127 mg/l	-
	Fresh water sediment	266700 mg/kg dwt	-
	Marine water sediment	26670 mg/kg dwt	-
	Soil	53182 mg/kg dwt	-
	Sewage Treatment Plant	38,28 mg/l	-
(bis(isopropyl)naphthalene)	Sewage Treatment Plant	0,15 mg/l	-
	Fresh water	0,26 µg/l	-
	Marine	0,026 µg/l	-
	Fresh water sediment	0,94 mg/kg dwt	-
	Marine water sediment	0,094 mg/kg dwt	-
	Soil	0,19 mg/kg dwt	-

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

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. Use eye protection according to EN 166. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

SECTION 8: Exposure controls/personal protection

Skin protection

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.

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): nitrile rubber (0.5mm)

The recommendation for the type or types of glove to use when handling this product is based on information from the following source: EN374. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

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. Recommended: (EN 467) Wear overalls or long sleeved shirt.

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: organic vapour filter (Type A) particulate filter (EN 140)

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Physical state : Liquid.

Colour : Various

Odour : Odourless.

Odour threshold : Not available.

Melting point/freezing point : 0°C [Literature]

Initial boiling point and boiling range : Not relevant due to nature of the product.

Flammability (solid, gas) : Non-flammable in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks and mechanical impacts. Non-flammable but will burn on prolonged exposure to flame or high temperature.

SECTION 9: Physical and chemical properties

Lower and upper explosion limit : Not available.

Flash point : Closed cup: 102°C (215,6°F) [Literature]

Auto-ignition temperature : Not relevant due to nature of the product.

Decomposition temperature : Not available.

pH : Not applicable.

pH : Justification : Product is non-soluble (in water).

Viscosity : Dynamic (room temperature): 6500 to 7000 mPa·s [DIN EN ISO 3219]
Kinematic (room temperature): 4431 to 4975 mm^2/s [calculated.]
Kinematic (40°C): >20,5 mm^2/s [calculated.]

Solubility(ies) :

Media	Result
cold water	Soluble
hot water	Soluble
methanol	Very slightly soluble
acetone	Very slightly soluble

Solubility in water : Not available.

Partition coefficient: n-octanol/water : Not applicable.

Vapour pressure : 2,3 kPa (17,25 mm Hg) [Literature]

Evaporation rate : <1 (butyl acetate = 1)

Relative density : Not available.

Density : 1,407 to 1,467 g/cm^3 [20°C (68°F)] [DIN 53217]

Vapour density : >1 [Air = 1]

Explosive properties : Non-explosive in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.
No unusual hazard if involved in a fire.

Oxidising properties : Not available.

Particle characteristics

Median particle size : Not applicable.

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 : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : No specific data.

10.5 Incompatible materials : No specific data.

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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Solvent naphtha (petroleum), light arom.	LD50 Oral	Rat	8400 mg/kg	-
propylene carbonate	LD50 Oral	Rat	>5000 mg/kg	-
hexamethylene-1,6-diisocyanate oligomer (type uretdione)	LC50 Inhalation Dusts and mists	Rat	18500 mg/m³	1 hours
	LC50 Inhalation Dusts and mists	Rat	0,158 mg/l	4 hours
	LD50 Oral	Rat	>5000 mg/kg	-
polyhexamethylene diisocyanate	LC50 Inhalation Dusts and mists	Rat - Female	0,39 mg/l	4 hours
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours
	LD50 Oral	Rat	>5000 mg/kg	-
(bis(isopropyl)naphthalene)	LC50 Inhalation Vapour	Rat	5,64 mg/l	4 hours
	LD50 Dermal	Rat	>4500 mg/kg	-
	LD50 Oral	Rat	>4000 mg/kg	-
hydrocarbons, aromatic, C9	LD50 Oral	Rat	8400 mg/kg	-
2-ethylhexanal	LD50 Dermal	Rabbit	4135 mg/kg	-
	LD50 Oral	Rat	2600 mg/kg	-
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	LC50 Inhalation Dusts and mists	Rat	0,031 mg/l	4 hours

Conclusion/Summary : Based on available data, the classification criteria are not met.

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Dacfill PU Basecoat	N/A	N/A	N/A	N/A	14,4
Solvent naphtha (petroleum), light arom.	8400	N/A	N/A	N/A	N/A
hexamethylene-1,6-diisocyanate oligomer (type uretdione)	N/A	N/A	N/A	N/A	0,5
polyhexamethylene diisocyanate	N/A	N/A	N/A	N/A	1,5
hydrocarbons, aromatic, C9	8400	N/A	N/A	N/A	N/A
2-ethylhexanal	2600	4135	N/A	N/A	N/A
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	N/A	N/A	N/A	N/A	0,031

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Solvent naphtha (petroleum), light arom.	Eyes - Mild irritant	Rabbit	-	24 hours 100 microliters	-
propylene carbonate	Eyes - Moderate irritant	Rabbit	-	60 milligrams	-
	Skin - Moderate irritant	Human	-	72 hours 100 milligrams Intermittent	-
	Skin - Moderate irritant	Rabbit	-	500 milligrams	-
hexamethylene-1,6-diisocyanate oligomer	Eyes - Cornea opacity	Rabbit	1	-	-

SECTION 11: Toxicological information

(type uretdione)					
	Skin - Oedema	Rabbit	1	4 hours	-
polyhexamethylene diisocyanate	Eyes - Cornea opacity	Rabbit	1	-	-
	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-
	Skin - Oedema	Rabbit	1	4 hours	-
	Skin - Moderate irritant	Rabbit	-	500 milligrams	-
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	Eyes - Cornea opacity	Rabbit	1	-	-
	Skin - Oedema	Rabbit	0	-	-
(bis(isopropyl)naphthalene)	Eyes - Cornea opacity	Rabbit	0	-	-
	Skin - Oedema	Rabbit	0	-	-
hydrocarbons, aromatic, C9	Eyes - Mild irritant	Rabbit	-	24 hours 100 Ul	-
2-ethylhexanal	Skin - Mild irritant	Rabbit	-	425 milligrams	-

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

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

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

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
hexamethylene-1,6-diisocyanate oligomer (type uretdione)	skin	Guinea pig	Sensitising
polyhexamethylene diisocyanate	Respiratory	Guinea pig	Not sensitizing
	skin	Guinea pig	Sensitising
	skin	Mouse	Sensitising
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	skin	Guinea pig	Sensitising
	skin	Mouse	Sensitising
	skin	Rabbit	Sensitising
(bis(isopropyl)naphthalene)	skin	Guinea pig	Not sensitizing

Skin : May cause an allergic skin reaction.

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

Mutagenicity

Product/ingredient name	Test	Experiment	Result
hexamethylene-1,6-diisocyanate oligomer (type uretdione)	OECD 476	Subject: Mammalian-Animal	Positive
	OECD 471	Subject: Bacteria	Negative
polyhexamethylene diisocyanate	OECD 471	Subject: Bacteria	Negative
	OECD 476	Subject: Mammalian-Animal	Negative
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	OECD 471	Experiment: In vitro Subject: Bacteria	Negative
	OECD 473	Experiment: In vitro Subject: Mammalian-Animal	Negative
(bis(isopropyl)naphthalene)	OECD 471	Experiment: In vitro Subject: Bacteria	Negative
	OECD 473+476	Experiment: In vitro Subject: Mammalian-Animal	Negative

SECTION 11: Toxicological information

Conclusion/Summary : Based on available data, the classification criteria are not met.

Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
(bis(isopropyl)naphthalene)	Negative - Route of exposure unreported - TD	Rat	-	-

Conclusion/Summary : Based on available data, the classification criteria are not met.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Dose	Exposure
hydrocarbons, aromatic, C9	-	-	Negative	Mammal - species unspecified	Route of exposure unreported	-

Conclusion/Summary : Based on available data, the classification criteria are not met.

Teratogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Solvent naphtha (petroleum), light arom.	Category 3 Category 3	-	Respiratory tract irritation Narcotic effects
hexamethylene-1,6-diisocyanate oligomer (type uretdione)	Category 3	-	Respiratory tract irritation
polyhexamethylene diisocyanate	Category 3	-	Respiratory tract irritation
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	Category 3	-	Respiratory tract irritation
hydrocarbons, aromatic, C9	Category 3 Category 3	-	Respiratory tract irritation Narcotic effects
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Product/ingredient name	Result
Solvent naphtha (petroleum), light arom. (bis(isopropyl)naphthalene) hydrocarbons, aromatic, C9	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

SECTION 11: Toxicological information

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
redness

Ingestion : No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
hexamethylene-1,6-diisocyanate oligomer (type uretdione)	Sub-acute NOAEL Inhalation Dusts and mists	Rat	0,41 mg/m³	6 hours; 5 days per week Intermittent
polyhexamethylene diisocyanate	Sub-chronic LC50 Inhalation Dusts and mists	Rat	14,7 mg/m³	6 hours; 5 days per week Intermittent
	Sub-acute LC50 Inhalation Dusts and mists	Rat	89,9 mg/m³	6 hours; 5 days per week Intermittent
	Sub-acute LCLo Inhalation Dusts and mists	Rat	4,3 mg/m³	6 hours; 5 days per week Intermittent
	Chronic NOAEL Inhalation Dusts and mists	Rat	3,3 mg/m³	6 hours; 5 days per week Intermittent
(bis(isopropyl)naphthalene)	Chronic NOAEL Oral	Rat	170 mg/kg	6 months

Conclusion/Summary : Based on available data, the classification criteria are not met.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
hexamethylene-1,6-diisocyanate oligomer (type uretdione)	Acute EC50 5560 mg/l	Bacteria	3 hours
	Acute EC50 >100 mg/l	Daphnia spec.	48 hours
	Acute IC50 >1000 mg/l	Algae - *Scenedesmus subspicatus*	72 hours
	Acute LC50 >100 mg/l	Fish	96 hours
polyhexamethylene diisocyanate	Acute EC50 >10000 mg/l	Bacteria	3 hours
	Acute EC50 >100 mg/l	Daphnia spec.	48 hours
	Acute IC50 >1000 mg/l	Algae - *Scenedesmus subspicatus*	72 hours
	Acute LC50 >100 mg/l	Fish	96 hours
(bis(isopropyl)naphthalene)	Acute EC10 >0,15 mg/l	Algae	72 hours
	Acute EC10 >0,16 mg/l	Daphnia spec.	48 hours
	Acute LC10 >0,5 mg/l	Fish	96 hours
	Acute NOEC >0,013 mg/l	Daphnia spec.	21 days

Conclusion/Summary : Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
propylene carbonate	OECD 301B	83,5 to 87,7 % - 29 days	-	-
hexamethylene-1,6-diisocyanate oligomer (type uretdione)	OECD 302C	18 % - Not readily - 28 days	-	-
	OECD 301C	1 % - Not readily - 28 days	-	-
	-	1 % - Not readily - 21 days	-	-
polyhexamethylene diisocyanate	OECD 301C	2 % - Not readily - 28 days	-	-
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	OECD 301F	0 % - Not readily - 28 days	-	-

Conclusion/Summary : Based on available data, the classification criteria are not met.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Solvent naphtha (petroleum), light arom.	-	-	Readily
hexamethylene-1,6-diisocyanate oligomer (type uretdione)	Fresh water 0,25 days, 23°C	50%; 0.03 day(s)	Not readily
polyhexamethylene diisocyanate	Fresh water 0,32 days, 23°C	50%; 0.49 day(s)	Not readily
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	-	-	Not readily
(bis(isopropyl)naphthalene)	Fresh water 2,5 days, 20°C	>70%; < 28 day(s)	Readily
hydrocarbons, aromatic, C9	-	-	Readily
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	-	-	Not readily

12.3 Bioaccumulative potential

SECTION 12: Ecological information

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Solvent naphtha (petroleum), light arom.	-	10 to 2500	High
propylene carbonate	-0,41	-	Low
hexamethylene-1,6-diisocyanate oligomer (type uretdione)	5,54	367,7	Low
polyhexamethylene diisocyanate	5,54	367,7	Low
(bis(isopropyl)naphthalene)	6,081	1800 to 6400	High
hydrocarbons, aromatic, C9	3.7 to 4.5	10 to 2500	High
2-ethylhexanal	3,07	-	Low
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	0,99	-	Low

12.4 Mobility in soil

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

Mobility : Nonvolatile liquid.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance.

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.

European waste catalogue (EWC)

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

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. 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 or ID number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

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 available.

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

Product/ingredient name	%	Designation [Usage]
Dacfill PU Basecoat	≥90	3

Labelling : **As from August 24 2023 adequate training is required before industrial or professional use.**

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.

VOC for Ready-for-Use Mixture : 2004/42/EC - IIA/i: 500g/l (2010). <= 160g/l VOC.

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

SECTION 15: Regulatory information

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

Explosive precursors : Not applicable.

EU - Ozone depleting substances

Not listed.

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

Not listed.

Persistent Organic Pollutants (850/2004/EC)

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations

Austria

VbF class : Not regulated.

Storage code : LGK 10

Classification, packaging and labelling : Not available.

Limitation of the use of organic solvents : Permitted.

Waste catalogue : 55513

References : Federal Law Gazette Nr. 240/1991 - Regulation on Combustible liquids - Warning Classes
Ministry of the Economy and Labor 2003 - GKV 2003 - Decree 429/2011
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

Belgium

Book VI carcinogenic agents annex VI.2-1 - VI.2-3

Ingredient name	Status
Silice	Listed
Toluène diisocyantes	Listed

References : Royal Decree of 2 December 1993 concerning the protection of workers against the risks related to exposure to carcinogens and mutagens at work
Royal Decree 374/2001, protection of the health and safety of workers from the risks related to chemical agents at work
Royal Decree 396/2006, which establishes minimum health and safety requirements for the protection of workers from risk of exposure to asbestos at the workplace.
Royal Decree of 17 May 2007, ammending the Royal Decree of 11 March 2002 relating to the protection of the health and the safety of workers against the risks related to chemical agents in the workplace, Belgium State Gazette 2007-2327 of 7 June 2007.
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

Bulgaria

SECTION 15: Regulatory information

References : Ordinance No. 9 of 4 August 2006 on the protection of workers from the risks related to exposure to asbestos at work
Ordinance No. 13 of 30 December 2003 on the protection of workers from the risks related to exposure to chemical agents at work
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

Croatia

References : Regulation about Maximum Exposure Limits of harmful substances in the atmosphere of the working environment NN 92/93
Regulation about application of personal safety equipment NN 39/06
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

Cyprus

References : -

Czech Republic

Storage code : IV

References : Decree of the government no. 441/2004 Sb., which amends Decree of the government no. 178/2001 Sb., which implements the health and safety at work conditions, according to the Decree of the government no. 523/2002 Sb.
Decree of the government no. 194/2001 Sb., which implements the technical requirements for aerosol dispensersEC Regulation 1907/2006 (REACH), EC Regulation 1272/2008 (CLP), EC Regulation 648/2004 on detergents, Act No. 350/2011 Coll. on chemical substances and chemical mixtures, Act No. 185/2001 Coll. on waste, Decree No. 381/2001 Coll., Catalog of waste, Decree No. 383//2001 Coll., on details of waste
management, Act No. 258/2000 Coll. on public health, Government Regulation No. 361/2007 Coll., establishing the conditions for health protection at work, Act No. 201/2012 Coll., on air protection and related decrees, Act No. 477/2001 Coll. on packaging, Decree No. 48/1982 Coll., which establishes basic requirements to ensure the safety of work and technical equipment, communication No. 8/2013 Coll. m.s. (ADR), notice No. 23/2013 Coll. (RID), Czech state standards
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

Denmark

Product registration number : Not available.

Fire class : IV-2

Denmark – Cancer risks : Not listed

MAL-code : 5-6

Protection based on MAL : **According to the regulations on work involving coded products, the following stipulations apply to the use of personal protective equipment:**

General: Gloves must be worn for all work that may result in soiling. Apron/ coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. A face shield must be worn in work involving spattering if a full mask is not required. In this case, other recommended use of eye protection is not required.

In all spraying operations in which there is return spray, the following must be worn: respiratory protection and arm protectors/apron/coveralls/protective clothing as appropriate or as instructed.

SECTION 15: Regulatory information

MAL-code: 5-6

Application: When using scraper or knife, brush, roller etc. for pre- and post-treatments in a spray booth where the operator is outside the spray zone and when working in similar new* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. When spraying in new* booths and cabins with non-atomizing guns.

- Protective clothing must be worn.

During non-atomising spraying in existing* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. When spraying in existing* spray booths, if the operator is outside the spray zone. When using scraper or knife, brush, roller, etc, for pre- and post-treatments in cabins or booths of the existing* facility type, if the operator is inside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments outside a closed facility, spray booth or spray cabin. During downtimes, cleaning and repair in closed facilities, spray booths or cabins, if there is a risk of contact with wet paint or organic solvents.

- Air-supplied full mask and protective clothing must be worn.

When spraying in new* booths if the operator is outside the spray zone.

- Air-supplied full mask must be worn.

During all spraying where atomisation occurs in cabins or spray booths where the operator is inside the spray zone and during spraying outside a closed facility, cabin or booth.

- Air-supplied full mask, protective clothing and hood must be worn.

Drying: Items for drying/drying ovens that are temporarily placed on such things as rack trolleys, etc, must be equipped with a mechanical exhaust system to prevent fumes from wet items from passing through workers' inhalation zone.

Polishing: When polishing treated surfaces, a mask with dust filter must be worn. When machine grinding, eye protection must be worn. Work gloves must always be worn.

Caution The regulations contain other stipulations in addition to the above.

*See Regulations.

MAL-code for ready-for-use mixture : Not applicable.

Protection based on MAL for ready-for-use mixture : Not applicable.

Not applicable.

Not applicable.

Low-boiling liquids : Not applicable.

Restrictions on use : Not to be used by professional users below 18 years of age. See the National Working Environment Authorities Executive Order regarding Young People At Work.

List of undesirable substances : Listed

Carcinogenic waste : Not applicable.

SECTION 15: Regulatory information

Waste card number : 03.21

Waste group : Z

Remark : Not available.

References : Executive Order no. 301 of 13 May 1993 “Executive order on the determination of code numbers”. (MAL code)
Executive Order no. 302 of 13 May 1993 “Executive Order on work with products with code numbers”. (MAL code)
Executive Order no. 559 of 4 July 2002 "Executive Order on special duties for manufacturers, suppliers and importers etc. of substances and materials according to the law on the working environment".
Executive Order no. 908 of 27 September 2005 "Executive Order on measures for prevention of cancer risk when working with substances and materials".
Executive Order no. 239 of 6 April 2005 "Executive Order on young people's work".
Danish Working Environment Authority Guidance No. C.0.1. of August 2007 "Trace limit value list for substances and materials".
Executive Order no. 571 of 29 November 1984 "Executive Order on use of propellants and solvents in aerosol containers".
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

Estonia

References : Regulation of the Estonian Government of 02.02.2000 No. 32 Occupational health and occupational safety requirements for asbestos.
Regulation of the Estonian Government of 15.12.2005 No. 309 Occupational health and occupational safety requirements for carcinogenic and mutagenic substances.
Regulation of the Estonian Government of 18.09.2001 No. 293 Occupational exposure limits of chemicals.
Regulation of the Estonian Government of 20.03.2001 No. 105 Occupational health and occupational safety requirements for handling dangerous chemicals and materials.
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

Finland

NACE : Not available.

UC62 : Not available.

References : Regulation of the Ministry of Social Affairs and Health on occupational exposure limit values 795/2007
Aerosol regulation amendment 805/1994
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

France

Social Security Code, Articles L 461-1 to L 461-7 :

Solvent naphtha (petroleum), light arom.	RG 84
hexamethylene-1,6-diisocyanate oligomer (type uretdione)	RG 62
polyhexamethylene diisocyanate	RG 62
hydrocarbons, aromatic, C9	RG 84
2-ethylhexanal	RG 84
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	RG 62

SECTION 15: Regulatory information

Classified installations for environmental protection : Not available.

Reinforced medical surveillance : Decree n ° 2012-135 of January 30, 2012 relating to the organization of occupational medicine: applicable

Remark : Not available.

References : Tables of anticipated professional diseases according to article R461-3 of the labour code
Labour code: Regulatory and recommended occupational exposure limits: Art. R231-55 to Art. R231-55-3.
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

Germany

Storage class (TRGS 510) : 10

Hazardous incident ordinance

This product is not controlled under the Germany Hazardous Incident Ordinance.

Named substances

Name	Reference number

Danger criteria

Category	Reference number

Hazard class for water : 3

Technical instruction on air quality control (TA Luft)

Number [Class]	Description
5.2.1 5.2.5 5.2.5 [I]	Total dust Organic substances Organic substances

AOX : The product contains organically bound halogens and can contribute to the AOX value in waste water.

References : Decree No. 44/2000 (XII.27.) EüM of the Ministry of Health on detailed arrangements for certain procedures, activities relating to dangerous substances and dangerous preparations plus amendments
Decree No. 25/2000 (IX.30.) EüM of the Ministry of Health on chemical safety at work plus amendments
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

Greece

References : Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878

Hungary

SECTION 15: Regulatory information

References : Regulation on the restrictions on the marketing and use of certain dangerous substances, preparations and articles according to the Chemicals Law
Technical Rules for Hazardous Substances (TRGS): Occupational Exposure Limits (TRGS 900)
Technical Rules for Hazardous Substances (TRGS): Directory of carcinogenic, mutagenic and reprotoxic substances (TRGS 905)
First General Administrative Regulation Pertaining to the Federal Immission Control Act (Technical Instructions on Air Quality Control – TA Luft)
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

Ireland

References : Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001 (S.I. No. 619 of 2001)
Safety, Health and Welfare at Work (Carcinogens) Regulations 2001 (S.I. No. 78 of 2001)
Safety, Health and Welfare at Work (General Application) Regulations 2007
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

Italy

D.Lgs. 152/06 : Not determined.

References : Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878

Latvia

References : Regulation of Cabinet of Ministers No. 325 of 15 May 2007 "Labour protection requirements for contact with chemical substances in the workplace"
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

Lithuania

References : Regulation about Maximum Exposure Limits of harmful substances in the atmosphere of the working environment NN 92/93
Regulation about application of personal safety equipment NN 39/06
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

Luxembourg

References : -

Malta

References : -

Netherlands

Water Discharge Policy (ABM) : Z(1) Non biodegradable substances with hazardous properties for humans and the environment (carcinogenicity/ mutagenicity/ reprotoxicity/ bioacumulative potential/ toxicity or persistence). Decontamination effort: Z

Remark : Not available.

SECTION 15: Regulatory information

References : Water Discharge Policy (ABM)
Netherlands Emission Guidelines for Air (NeR)
List of carcinogenic substances and processes according to article 4.11 of the Working Conditions Act; Health and Safety Act
List of mutagenic substances and processes according to article 4.11 of the Working Conditions Act; Health and Safety Act
Non-limited list of reprotoxic substances (with additional registration requirement) according to article 4..2a(2) of the Working Conditions Act; Health and Safety Act
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

Poland

References : Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

Portugal

References : Occupational Health and Safety. Professional exposure limit values for chemical agents (NP 1796 2007)
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

Romania

References : Order 595-2002 approving technical Regulations regarding spray aerosol containers
Governmental Decision 1218-2006 on establishing the minimum requirements of labour safety and health for ensuring the protection of workers against risks connected to the presence of chemical agents
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

Slovakia

References : Government regulation no. 45/2002 Consolidated to 16 January 2002 on the protection of health at work from chemical agents
Government Regulation 301/2007 on the protection of workers from risks associated with exposure to carcinogenic and mutagenic factors
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

Slovenia

References : Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

Spain

SECTION 15: Regulatory information

References : Royal Decree 374/2001, protection of the health and safety of workers from the risks related to chemical agents at work
ROYAL DECREE 2549/1994. Regulation on aerosol dispensers
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

Sweden

Ordinance on Thermoset Plastics : Not applicable.

Thermoset plastic waste : Not available.

Waste group : 080111*

Flammable liquid class (SRVFS 2005:10) : Not applicable.

References : Thermosetting plastics AFS 2005:18
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

International regulations

Stockholm Convention on Persistent Organic Pollutants

List name	Ingredient name	Status
Not listed.		

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

List name	Ingredient name	Status
Not listed.		

CN code : 3208 90 91 00

Inventory list

Australia : At least one component is not listed.

Canada : Not determined.

China : At least one component is not listed.

Eurasian Economic Union : **Russian Federation inventory**: Not determined.

Japan : **Japan inventory (CSCL)**: At least one component is not listed.
Japan inventory (ISHL): At least one component is not listed.

New Zealand : At least one component is not listed.

Philippines : At least one component is not listed.

Republic of Korea : At least one component is not listed.

Taiwan : All components are listed or exempted.

Thailand : Not determined.

Turkey : Not determined.

United States : Not determined.

Viet Nam : Not determined.

15.2 Chemical safety assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

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
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative

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

Classification	Justification
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

Europe

Full text of abbreviated H statements :

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361	Suspected of damaging fertility or the unborn child.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
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.
H413	May cause long lasting harmful effects to aquatic life.
EUH066	Repeated exposure may cause skin dryness or cracking.

Full text of classifications [CLP/GHS] :

Acute Tox. 1	ACUTE TOXICITY - Category 1
Acute Tox. 3	ACUTE TOXICITY - Category 3
Acute Tox. 4	ACUTE TOXICITY - Category 4
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
Aquatic Chronic 4	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 4
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Resp. Sens. 1	RESPIRATORY SENSITISATION - Category 1
Skin Corr. 1C	SKIN CORROSION/IRRITATION - Category 1C

SECTION 16: Other information

Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1B	SKIN SENSITISATION - Category 1B
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

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Notice to reader

IMPORTANT NOTE: 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 information contained in this data sheet (as may be amended from time to time) is not intended to be exhaustive and is presented in good faith and believed to be correct as of the date on which it is prepared. It is the user's responsibility to verify that this data sheet is current prior to using the product to which it relates. Persons using the information must make their own determinations as to the suitability of the relevant product for their purposes prior to use. Where those purposes are other than as specifically recommended in this safety data sheet, then the user uses the product at their own risk.

MANUFACTURER'S DISCLAIMER: the conditions, methods and factors affecting the handling, storage, application, use and disposal of the product are not under the control and knowledge of the manufacturer. Therefore the manufacturer does not assume responsibility for any adverse events which may occur in the handling, storage, application, use, misuse or disposal of the product and, so far as permitted by applicable law, the manufacturer expressly disclaims liability for any and all loss, damages and/or expenses arising out of or in any way connected to the storage, handling, use or disposal of the product. Safe handling, storage, use and disposal are the responsibility of the users. Users must comply with all applicable health and safety laws.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.