SAFETY DATA SHEET

RUST-OLEUM INDUSTRIAL

2100 Hard-Hat Series Topcoat

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

1.1 Product identifier

Product name : 2100 Hard-Hat Series Topcoat

Product description : Paint Aerosol.

Product type : Aerosol.

UFI : 5HU2-Y05A-600M-T7VC

Product code : ROI0142

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

Identified uses
Consumer Industrial Professional

Uses advised against	Reason
None identified.	-

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

Supplier

Telephone number United Kingdom: Great Britain : +44 870 8200418 / +44 2038073798

Hours of operation : 24 / 7

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to UK CLP/GHS

Aerosol 1, H222, H229
Eye Irrit. 2, H319
STOT SE 3, H336

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

SECTION 2: Hazards identification

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 : Danger

Hazard statements : H222, H229 - Extremely flammable aerosol. Pressurised container: may burst if heated.
H319 - Causes serious eye irritation.
H336 - May cause drowsiness or dizziness.

Precautionary statements

General : P103 - Read carefully and follow all instructions.
P102 - Keep out of reach of children.
P101 - If medical advice is needed, have product container or label at hand.

Prevention : P280 - Wear protective gloves. Wear eye or face protection.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 - Do not spray on an open flame or other ignition source.
P271 - Use only outdoors or in a well-ventilated area.
P251 - Do not pierce or burn, even after use.

Response : Not applicable.

Storage : P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

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

Hazardous ingredients : n-butyl acetate
Ethylacetate

Supplemental label elements : EUH066 - Repeated exposure may cause skin dryness or cracking.
EUH208 - Contains 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate, compd. with polyethylene glycol hydrogen maleate C9-11-alkyl ethers and maleic anhydride. 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 : Not applicable.

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.

SECTION 2: Hazards identification

Product meets the criteria for endocrine disrupting properties according to Regulation (EC) No. 1907/2006. : Not applicable

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Type
dimethyl ether	REACH #: 01-2119472128-37 EC: 204-065-8 CAS: 115-10-6 Index: 603-019-00-8	≥50 - ≤75	Flam. Gas 1A, H220 Press. Gas (Comp.), H280	[2]
n-butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1	≥10 - ≤25	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	[1] [2]
Ethylacetate	REACH #: 01-2119475103-46 EC: 205-500-4 CAS: 141-78-6 Index: 607-022-00-5	≥10 - ≤25	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	[1] [2]
1-methoxy-2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3	≤5	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
2-methoxy-1-methylethyl acetate	EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7	≤3	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate, compd. with polyethylene glycol hydrogen maleate C9-11-alkyl ethers	CAS: 1259547-09-5	<1	Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
hydrocarbons, C10-C13, n-/ iso-/ cyclo-alkanes, < 2% aromatics	REACH #: 01-2119457273-39 CAS: 64742-48-9	≤0,3	Asp. Tox. 1, H304 EUH066	[1]
maleic anhydride	REACH #: 01-2119472428-31 EC: 203-571-6 CAS: 108-31-6 Index: 607-096-00-9	<0,001	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1A, H317 STOT RE 1, H372 (inhalation) EUH071 **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

SECTION 3: Composition/information on ingredients

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit

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.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 necessary, call a poison center or physician. 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.

Skin contact : Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. 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 necessary, call a poison center or physician. 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. 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.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

Skin contact : Adverse symptoms may include the following:
irritation
dryness
cracking

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

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.

Unsuitable extinguishing media : None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed.

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

5.3 Advice for firefighters

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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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 British standard BS EN 469 will provide a basic level of protection for chemical incidents.

Additional information : Pressurised container: protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Do not puncture, incinerate or store the container at temperatures above 49°C (120°F) or in direct sunlight. Container explosion may occur under fire conditions or when heated. Bursting aerosol containers may be propelled from a fire at high speed.

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. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. 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).

6.3 Methods and material for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

SECTION 6: Accidental release measures

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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). Pressurised container: protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

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

Do not store above the following temperature: 35°C (95°F). Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Seveso Directive - Reporting thresholds

Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
P3a	150 tonnes	500 tonnes

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure limit values
dimethyl ether	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** STEL 15 minutes: 958 mg/m³. STEL 15 minutes: 500 ppm. TWA 8 hours: 400 ppm. TWA 8 hours: 766 mg/m³.
n-butyl acetate	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** STEL 15 minutes: 966 mg/m³. STEL 15 minutes: 200 ppm. TWA 8 hours: 724 mg/m³. TWA 8 hours: 150 ppm.
Ethylacetate	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** STEL 15 minutes: 400 ppm. TWA 8 hours: 200 ppm. STEL 15 minutes: 1468 mg/m³. TWA 8 hours: 734 mg/m³.
1-methoxy-2-propanol	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** Absorbed through skin. STEL 15 minutes: 560 mg/m³. STEL 15 minutes: 150 ppm. TWA 8 hours: 375 mg/m³. TWA 8 hours: 100 ppm.
2-methoxy-1-methylethyl acetate	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** Absorbed through skin. STEL 15 minutes: 548 mg/m³. TWA 8 hours: 50 ppm. TWA 8 hours: 274 mg/m³. STEL 15 minutes: 100 ppm.
maleic anhydride	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** Inhalation sensitiser. STEL 15 minutes: 3 mg/m³. TWA 8 hours: 1 mg/m³.

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: British Standard BS EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) British Standard BS EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) British Standard BS 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	Result	Value	Effects
dimethyl ether	**DNEL - General population - Long term - Inhalation**	471 mg/m³	Effects: Systemic
	DNEL - Workers - Long term - Inhalation	1894 mg/m³	Effects: Systemic
n-butyl acetate	**DNEL - Workers - Long term - Dermal**	7 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Consumers - Long term - Oral	3,4 mg/kg bw/day	Effects: Systemic
	DNEL - Workers - Short term - Inhalation	960 mg/m³	Effects: Systemic

SECTION 8: Exposure controls/personal protection

DNEL - Workers - Short term - Inhalation	960 mg/m³	Effects: Local
DNEL - Workers - Long term - Inhalation	480 mg/m³	Effects: Systemic
DNEL - Workers - Long term - Inhalation	480 mg/m³	Effects: Local
DNEL - General population - Consumers - Short term - Inhalation	859,7 mg/m³	Effects: Systemic
DNEL - General population - Consumers - Short term - Inhalation	859,7 mg/m³	Effects: Local
DNEL - General population - Consumers - Long term - Inhalation	102,34 mg/m³	Effects: Systemic
DNEL - General population - Consumers - Long term - Inhalation	102,34 mg/m³	Effects: Local
DNEL - General population - Consumers - Long term - Dermal	3,4 mg/kg bw/day	Effects: Systemic
DNEL - General population - Long term - Oral	2 mg/kg bw/day	Effects: Systemic
DNEL - General population - Short term - Oral	2 mg/kg bw/day	Effects: Systemic
DNEL - General population - Long term - Dermal	3,4 mg/kg bw/day	Effects: Systemic
DNEL - General population - Short term - Dermal	6 mg/kg bw/day	Effects: Systemic
DNEL - Workers - Long term - Dermal	7 mg/kg bw/day	Effects: Systemic
DNEL - Workers - Short term - Dermal	11 mg/kg bw/day	Effects: Systemic
DNEL - General population - Long term - Inhalation	12 mg/m³	Effects: Systemic
DNEL - General population - Long term - Inhalation	35,7 mg/m³	Effects: Local
DNEL - Workers - Long term - Inhalation	48 mg/m³	Effects: Systemic
DNEL - General population - Short term - Inhalation	300 mg/m³	Effects: Local
DNEL - General population - Short term - Inhalation	300 mg/m³	Effects: Systemic
DNEL - Workers - Long term - Inhalation	300 mg/m³	Effects: Local

SECTION 8: Exposure controls/personal protection

	DNEL - Workers - Short term - Inhalation	600 mg/m³	Effects: Local
	DNEL - Workers - Short term - Inhalation	600 mg/m³	Effects: Systemic
Ethylacetate	**DNEL - Workers - Short term - Inhalation**	1468 mg/m³	Effects: Local
	DNEL - Workers - Short term - Inhalation	1468 mg/m³	Effects: Systemic
	DNEL - Workers - Long term - Inhalation	734 mg/m³	Effects: Local
	DNEL - Workers - Long term - Inhalation	34 mg/m³	Effects: Systemic
	DNEL - Workers - Long term - Dermal	63 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Consumers - Short term - Inhalation	734 mg/m³	Effects: Local
	DNEL - General population - Consumers - Short term - Inhalation	734 mg/m³	Effects: Systemic
	DNEL - General population - Consumers - Long term - Inhalation	367 mg/m³	Effects: Local
	DNEL - General population - Consumers - Long term - Inhalation	367 mg/m³	Effects: Systemic
	DNEL - General population - Consumers - Long term - Dermal	37 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Consumers - Long term - Oral	4,5 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Long term - Oral	4,5 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Long term - Dermal	37 mg/kg bw/day	Effects: Systemic
	DNEL - Workers - Long term - Dermal	63 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Long term - Inhalation	367 mg/m³	Effects: Local
	DNEL - General population - Long term - Inhalation	367 mg/m³	Effects: Systemic
	DNEL - General population - Short term - Inhalation	734 mg/m³	Effects: Local
	DNEL - General population - Short term - Inhalation	734 mg/m³	Effects: Systemic

SECTION 8: Exposure controls/personal protection

	DNEL - Workers - Long term - Inhalation	734 mg/m³	Effects: Local
	DNEL - Workers - Long term - Inhalation	734 mg/m³	Effects: Systemic
	DNEL - Workers - Short term - Inhalation	1468 mg/m³	Effects: Local
	DNEL - Workers - Short term - Inhalation	1468 mg/m³	Effects: Systemic
1-methoxy-2-propanol	**DNEL - Workers - Short term - Inhalation**	553,5 mg/m³	Effects: Local
	DNEL - Workers - Long term - Inhalation	369 mg/m³	Effects: Systemic
	DNEL - Workers - Long term - Dermal	50,6 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Consumers - Long term - Inhalation	43,9 mg/m³	Effects: Systemic
	DNEL - General population - Consumers - Long term - Dermal	18,1 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Consumers - Long term - Oral	3,3 mg/kg bw/day	Effects: Systemic
	DNEL - Workers - Long term - Inhalation	369 mg/m³	Effects: Systemic
	DNEL - Workers - Short term - Inhalation	553,5 mg/m³	Effects: Systemic
2-methoxy-1-methylethyl acetate	**DNEL - Workers - Long term - Inhalation**	275 mg/m³	Effects: Systemic
	DNEL - Workers - Long term - Dermal	153,5 mg/m³	Effects: Systemic
	DNEL - General population - Consumers - Long term - Dermal	54,8 mg/m³	Effects: Systemic
	DNEL - General population - Consumers - Long term - Oral	1,67 mg/m³	Effects: Systemic
	DNEL - Workers - Long term - Dermal	796 mg/kg	Effects: Systemic
	DNEL - General population - Long term - Dermal	320 mg/kg	Effects: Systemic
	DNEL - General population - Long term - Oral	36 mg/kg	Effects: Systemic
	DNEL - General population - Long term - Inhalation	33 mg/m³	Effects: Local
	DNEL - General population - Long term - Inhalation	33 mg/m³	Effects: Systemic

SECTION 8: Exposure controls/personal protection

	DNEL - Workers - Short term - Inhalation	550 mg/m³	Effects: Local
hydrocarbons, C10-C13, n-/ iso-/ cyclo-alkanes, < 2% aromatics	**DNEL - Workers - Long term - Dermal**	208 mg/kg bw/ day	Effects: Systemic
	DNEL - General population - Long term - Dermal	125 mg/kg bw/ day	Effects: Systemic
	DNEL - General population - Long term - Inhalation	185 mg/m³	Effects: Systemic
	DNEL - General population - Long term - Oral	125 mg/m³	Effects: Systemic
	DNEL - Workers - Long term - Inhalation	871 mg/m³	Effects: Systemic
maleic anhydride	**DNEL - Workers - Short term - Inhalation**	0,8 mg/m³	Effects: Systemic
	DNEL - Workers - Short term - Dermal	0,04 mg/kg	Effects: Systemic
	DNEL - Workers - Long term - Inhalation	0,4 mg/m³	Effects: Systemic
	DNEL - General population - Long term - Inhalation	0,05 mg/m³	Effects: Systemic
	DNEL - General population - Long term - Oral	0,06 mg/kg bw/ day	Effects: Systemic
	DNEL - General population - Long term - Inhalation	0,08 mg/m³	Effects: Local
	DNEL - Workers - Long term - Inhalation	0,081 mg/m³	Effects: Local
	DNEL - General population - Short term - Oral	0,1 mg/kg bw/ day	Effects: Systemic
	DNEL - General population - Short term - Dermal	0,1 mg/kg bw/ day	Effects: Systemic
	DNEL - General population - Long term - Dermal	0,1 mg/kg bw/ day	Effects: Systemic
	DNEL - Workers - Long term - Dermal	0,2 mg/kg bw/ day	Effects: Systemic
	DNEL - Workers - Short term - Inhalation	0,2 mg/m³	Effects: Local

PNECs

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Result	Value	Remarks
n-butyl acetate	**Fresh water**	0,18 mg/l	-
	Marine	0,018 mg/l	-
	Fresh water sediment	0,981 mg/kg	-
	Marine water sediment	0,0981 mg/kg	-
	Soil	0,0903 mg/kg	-
	Sewage Treatment Plant	35,6 mg/l	-
Ethylacetate	**Fresh water**	0,24 mg/l	-
	Marine	0,024 mg/l	-
	Fresh water sediment	1,15 mg/kg	-
	Marine water sediment	0,115 mg/kg	-
	Soil	0,148 mg/kg	-
	Sewage Treatment Plant	650 mg/l	-
1-methoxy-2-propanol	**Fresh water**	10 mg/l	-
	Fresh water sediment	41,6 mg/l	-
	Marine water sediment	4,17 mg/l	-
	Soil	2,47 mg/l	-
	Sewage Treatment Plant	100 mg/l	-
2-methoxy-1-methylethyl acetate	**Fresh water**	0,635 mg/l	-
	Fresh water sediment	3,29 mg/kg	-
	Marine water sediment	0,329 mg/kg	-
	Soil	0,29 mg/kg	-
	Sewage Treatment Plant	100 mg/l	-
	Marine water	0,0635 mg/l	-
maleic anhydride	**Fresh water**	0,04281 mg/l	-
	Marine water	0,004281 mg/l	-
	Soil	0,0415 mg/l	-
	Fresh water sediment	0,334 mg/kg	-
	Marine water sediment	0,0334 mg/kg	-
	Sewage Treatment Plant	44,6 mg/l	-

8.2 Exposure controls

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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. 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: chemical splash goggles.

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): polyethylene (PE), polyvinyl alcohol (PVA)

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. 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 British Standard BS EN 1149 for further information on material and design requirements and test methods. Recommended: Personnel should wear antistatic clothing made of natural fibres or of high-temperature-resistant synthetic fibres.

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. [Aerosol.]

Colour : Various

Odour : Solvent-like [Slight]

Odour threshold : Not available.

Melting point/freezing point : Not applicable.

Initial boiling point and boiling range : Not available.

Ingredient name	°C	°F	Method
dimethyl ether	-24,82	-12,7	

Flammability (solid, gas) : Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.
Slightly flammable in the presence of the following materials or conditions: shocks and mechanical impacts.
In use, may form flammable/explosive vapour-air mixture. Vapour may travel a considerable distance to source of ignition and flash back.

Lower and upper explosion limit : Lower: 2,39% [Calculated (Le Chatelier mixture rule)]
Upper: 15,49% [Calculated (Le Chatelier mixture rule)]

Flash point : Closed cup: -40°C (-40°F) [Literature dimethyl ether]

Auto-ignition temperature : 350°C (662°F) [Literature dimethyl ether]

Decomposition temperature : Not applicable.

pH : Not applicable.

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

Viscosity : Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C): Not available.

Solubility(ies) :

Media	Result
cold water	Not soluble
hot water	Not soluble

Solubility in water : Not available.

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

Vapour pressure : 513,3 kPa (3850 mm Hg) [Literature dimethyl ether]

Evaporation rate : Not available.

Relative density : Not available.

Density : 0,88 to 0,98 g/cm³ [20°C (68°F)] [DIN 53217]

Vapour density : >1 [Air = 1]

Explosive properties : Highly explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks and mechanical impacts.
Pressurised container: protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Do not puncture, incinerate or store the container at temperatures above 49°C (120°F) or in direct sunlight. Container explosion may occur under fire conditions or when heated. Bursting aerosol containers may be propelled from a fire at high speed.

Oxidising properties : Not available.

Particle characteristics

Median particle size : Not applicable.

SECTION 9: Physical and chemical properties

9.2 Other information

Heat of combustion : 23,58 kJ/g

Aerosol product

Type of aerosol : Spray

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 : Avoid all possible sources of ignition (spark or flame).

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 toxicological effects

Acute toxicity

Product/ingredient name	Result	Value
dimethyl ether	**Rat - Inhalation - LC50 Gas.**	308000 mg/m³ [1 hours]
	Mouse - Inhalation - LC50 Gas.	386 ppm [0,5 hours]
	Rat - Inhalation - LC50 Vapour	309 g/m³ [4 hours]
	Rat - Inhalation - LC50 Gas.	164000 ppm [4 hours]
n-butyl acetate	**Rat - Oral - LD50**	14000 mg/kg
	Rat - Inhalation - LC50 Vapour	>21 mg/l [4 hours]
	Rat - Inhalation - LC50 Vapour	9700 mg/m³ [4 hours]
Ethylacetate	**Rabbit - Oral - LD50**	4935 mg/kg
	Rat - Oral - LD50	5620 mg/kg
	Mouse - Oral - LD50	4,1 g/kg
	Rat - Inhalation - LC50 Vapour	>22,5 mg/l [6 hours]
1-methoxy-2-propanol	**Mouse - Oral - LD50**	11700 mg/kg
	Rabbit - Dermal - LD50	13 g/kg
	Rat - Inhalation - LC50 Vapour	30,02 mg/l [4 hours]
2-methoxy-1-methylethyl acetate	**Rabbit - Dermal - LD50**	>5 g/kg
	Rat - Inhalation - NOEL Dusts and mists	8100 mg/m³ [4 hours]
maleic anhydride	**Rat - Oral - LD50**	400 mg/kg

SECTION 11: Toxicological information

	Rabbit - Dermal - LD50	2620 mg/kg

Conclusion/Summary [Product] : 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)
dimethyl ether	N/A	N/A	164000	309	N/A
maleic anhydride	400	2620	N/A	N/A	N/A

Skin corrosion/irritation

Not available.

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

Ingredient name	Conclusion/Summary
n-butyl acetate	Non-irritating to the skin.
1-methoxy-2-propanol	Non-irritating to the skin.
2-methoxy-1-methylethyl acetate	Non-irritating to the skin.

Serious eye damage/eye irritation

Product/ingredient name	Result	Exposure	Observation
maleic anhydride	**Rabbit - Eyes - Severe irritant**	Amount/concentration applied: 1 %	-

Conclusion/Summary [Product] : Causes serious eye irritation.

Ingredient name	Conclusion/Summary
n-butyl acetate	Non-irritating to the eyes.
1-methoxy-2-propanol	Non-irritating to the eyes.
2-methoxy-1-methylethyl acetate	Non-irritating to the eyes.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : May cause drowsiness or dizziness.

Respiratory or skin sensitization

Not available.

Skin

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

Ingredient name	Conclusion/Summary
n-butyl acetate	Non-sensitiser to skin.
1-methoxy-2-propanol	Non-sensitiser to skin.
2-methoxy-1-methylethyl acetate	Non-sensitiser to skin.

Respiratory

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

SECTION 11: Toxicological information

Germ cell mutagenicity

Not available.

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

Carcinogenicity

Not available.

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

Reproductive toxicity

Not available.

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

Specific target organ toxicity (single exposure)

Product/ingredient name	Result
n-butyl acetate	STOT SE 3, H336 (Narcotic effects)
Ethylacetate	STOT SE 3, H336 (Narcotic effects)
1-methoxy-2-propanol	STOT SE 3, H336 (Narcotic effects)
2-methoxy-1-methylethyl acetate	STOT SE 3, H336 (Narcotic effects)

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Result
maleic anhydride	STOT RE 1, H372 (inhalation)

Aspiration hazard

Product/ingredient name	Result
hydrocarbons, C10-C13, n-/ iso-/ cyclo-alkanes, < 2% aromatics	ASPIRATION HAZARD - Category 1

Information on likely routes of exposure

Routes of entry anticipated: Dermal, Inhalation, Eyes.
Routes of entry not anticipated: Oral.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

Skin contact : Defatting to the skin. May cause skin dryness and irritation.

Ingestion : Can cause central nervous system (CNS) depression.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

SECTION 11: Toxicological information

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

Skin contact : Adverse symptoms may include the following:
irritation
dryness
cracking

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

Not available.

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

General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

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.

Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species
n-butyl acetate	**Acute - EC50 - Fresh water** 44 mg/l [48 hours]	Daphnia spec. - Daphnia spec.
	Acute - EC50 - Fresh water 397 mg/l [72 hours]	Algae
	Acute - LC50 - Fresh water 18 mg/l [96 hours]	Fish - Fathead minnow
	Chronic - NOEC - Fresh water 23 mg/l [21 days]	Daphnia spec. - Daphnia spec.
	Acute - LC50 - Marine water 32 mg/l [48 hours]	Crustaceans - Brine shrimp
Ethylacetate	**Acute - EC50** 5600 mg/l [72 hours]	Algae - Algae
	Acute - EC50 - Fresh water	Daphnia spec. - Water flea

SECTION 12: Ecological information

	165 mg/l [48 hours]	
	Chronic - NOEC - Fresh water 2,4 mg/l [21 days]	Daphnia spec. - Water flea
	Acute - LC50 - Fresh water 230 mg/l [48 hours]	Fish - Fathead minnow
	Chronic - NOEC - Fresh water 6,9 mg/l [6,9 hours]	Fish - Fathead minnow
	Chronic - NOEC - Fresh water 2,4 mg/l [21 days]	Daphnia spec. - Water flea
1-methoxy-2-propanol	**Acute - LC50 - Fresh water** 6812 mg/l [96 hours]	Fish - Golden orfe (leuciscus idus)
	Acute - EC50 23300 mg/l [96 hours]	Daphnia spec. - Daphnia spec.
	Acute - EC50 >1000 mg/l [7 days]	Algae
2-methoxy-1-methylethyl acetate	**Acute - NOEC** >1000 mg/l [96 hours]	Algae - Algae
	Acute - LC50 - Fresh water 130 mg/l [96 hours]	Fish - Rainbow trout (oncorhynchus mykiss)
	Chronic - LC10 100 mg/l [21 days]	Daphnia spec. - Daphnia spec.
	Chronic - NOEC - Fresh water 47,5 mg/l [14 days]	Fish
maleic anhydride	**Acute - LC50 - Fresh water** 230 ppm [96 hours]	Fish - Western mosquitofish - Adult

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

12.2 Persistence and degradability

Product/ingredient name	Test	Result
n-butyl acetate	-	90% [28 days] - Readily
	-	83% [28 days] - Readily
	-	80% [5 days]
Ethylacetate	-	70% [28 days] - Readily
1-methoxy-2-propanol	**1,95 gO_2/g - ThOD**	>90% [5 days] - Readily
	-	96% [28 days] - Readily
	-	88 to 92% [28 days] - Readily
2-methoxy-1-methylethyl acetate	-	100% [8 days] - Inherent

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

Ingredient name **Conclusion/Summary**

SECTION 12: Ecological information

n-butyl acetate — This product is readily biodegradable.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-butyl acetate	-	-	Readily
Ethylacetate	-	-	Readily
1-methoxy-2-propanol	<28 days [Fresh water] [5 to 25 °C]	-	Readily
2-methoxy-1-methylethyl acetate	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
dimethyl ether	0,07	-	Low
n-butyl acetate	2,3	10	Low
Ethylacetate	0,68	30	Low
1-methoxy-2-propanol	<1	<100	Low
2-methoxy-1-methylethyl acetate	1,2	-	Low
maleic anhydride	-2,78	-	Low

12.4 Mobility in soil

Soil/water partition coefficient : Not available.

Mobility : Volatile. This product is likely to volatilise rapidly into the air because of its high vapour pressure.

12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
dimethyl ether	No	N/A	N/A	No	N/A	N/A	N/A
n-butyl acetate	No	N/A	No	No	No	N/A	No
Ethylacetate	No	N/A	No	No	No	N/A	No
1-methoxy-2-propanol	No	No	No	No	No	No	No
2-methoxy-1-methylethyl acetate	No	N/A	N/A	No	N/A	N/A	N/A
2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate, compd. with polyethylene glycol hydrogen maleate C9-11-alkyl ethers	No	N/A	N/A	No	N/A	N/A	N/A
hydrocarbons, C10-C13, n-/iso-/ cyclo-alkanes, < 2% aromatics	No	N/A	N/A	No	N/A	N/A	N/A
maleic anhydride	N/A	N/A	N/A	Yes	N/A	N/A	N/A

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.

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.

Waste catalogue

Waste code	Waste designation
20 01 27*	paint, inks, adhesives and resins containing hazardous substances

Special precautions : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	UN1950	UN1950	UN1950	UN1950
14.2 UN proper shipping name	AEROSOLS, flammable	AEROSOLS, flammable	AEROSOLS, flammable	AEROSOLS, flammable
14.3 Transport hazard class(es)	2 	2 	2.1 	2.1 
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

Additional information ADR

Limited quantity : 1L
Transport Category : 2
Classification code : 5F
ADR Label Model Number : 2.1
Excepted Quantity : E0
Tunnel code : (D)
Packing instructions : P207, LP200
Mixed Packing Provisions : MP9
Special Packing Provisions : PP87, RR6, L2
Special provisions : 190, 327, 344, 625

Additional information ADN

Limited quantity : 1L
Classification code : 5F

SECTION 14: Transport information

Special provisions : 190, 327, 344, 625

Additional information IMDG

Limited quantity : 1L

Emergency schedules : F-D, S-U

Segregation code : SG69 - For AEROSOLS with a maximum capacity of 1 L: segregation as for class 9. Stow “separated from” class 1 except for division 1.4. For AEROSOLS with a capacity above 1 L: segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: segregation as for the appropriate subdivision of class 2.

Special provisions : 63, 190, 277, 327, 344, 381, 959

Additional information IATA

Passenger and Cargo Aircraft : Quantity limitation 75kg Packaging instruction 203

Cargo aircraft : Quantity limitation 150kg Packaging instruction 203

Limited Quantities - Passenger Aircraft : Quantity limitation 30kg Packaging instruction Y203

Special provisions : A145, A167, A802

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 Maritime 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

UK (GB)/REACH

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed above the relevant limit.

Substances of very high concern

None of the components are listed above the relevant limit.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Product/ingredient name	%	Designation [Usage]
2100 Hard-Hat Series Topcoat	≥90	3

Labelling : Not applicable.

Synthetic polymer microparticles - Designation 78

Generic identity of polymer(s) : Not applicable.

Total percentage of synthetic polymer microparticles : Not applicable.

Other EU regulations

VOC : Exempt

SECTION 15: Regulatory information

VOC for Ready-for-Use Mixture : Exempt

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

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

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

Aerosol dispensers :

Extremely flammable

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category
P3a

EU regulations

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

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

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.

SECTION 15: Regulatory information

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

CN code : 3208 10 90 00

Inventory list

Australia : At least one component is not listed.

Canada : At least one component is not listed.

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 : At least one component is not listed.

Thailand : Not determined.

Turkey : At least one component is not listed.

United States : At least one component is not listed.

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
GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = GB 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

Classification	Justification
Aerosol 1, H222, H229	On basis of test data
Eye Irrit. 2, H319	Calculation method
STOT SE 3, H336	Calculation method

Full text of abbreviated H statements

H220	Extremely flammable gas.
H222, H229	Extremely flammable aerosol. Pressurised container: may burst if heated.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H302	Harmful if swallowed.
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.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H336	May cause drowsiness or dizziness.

SECTION 16: Other information

H372	Causes damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH071	Corrosive to the respiratory tract.

Full text of classifications

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aerosol 1	AEROSOLS - Category 1
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
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. Gas 1A	FLAMMABLE GASES - Category 1A
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Press. Gas (Comp.)	GASES UNDER PRESSURE - Compressed gas
Resp. Sens. 1	RESPIRATORY SENSITISATION - Category 1
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
STOT RE 1	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1
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.

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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.