



SAFETY DATA SHEET

2169 & 2182 Hard-Hat Primers

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

1.1 Product identifier

Product name : 2169 & 2182 Hard-Hat Primers
Product description : Aerosol. Paint
Product type : Aerosol.
UFI : 8CU1-70M7-000Y-QAAX

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

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)

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

Telephone number Greece	: Emergency Telephone Poison Center Nos. Children Aglaia Kyriakou +30 210 7793777
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

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Telephone number Poland	: +48 223988029
Telephone number Portugal	: +351 308801773
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]

Aerosol 1, H222, H229
STOT SE 3, H336

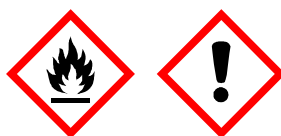
The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

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 : Danger

Hazard statements : H222, H229 - Extremely flammable aerosol. Pressurised container: may burst if heated.
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 : 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
1-methoxy-2-propanol

Supplemental label elements : EUH208 - Contains 3-aminopropyltriethoxysilane. May produce an allergic reaction.
EUH211 - Warning! Hazardous respirable droplets may be formed when sprayed.
Do not breathe spray or mist.

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SECTION 2: Hazards identification

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.

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
n-butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1	≤14	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	-	[1]
Ethylacetate	REACH #: 01-2119475103-46 EC: 205-500-4 CAS: 141-78-6 Index: 607-022-00-5	≤5,3	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	≤3	Flam. Liq. 3, H226 STOT SE 3, H336	-	[1]
hydrocarbons, C10-C13, n-/iso-/ cyclo-alkanes, < 2% aromatics	REACH #: 01-2119457273-39 EC: 918-481-9 Index: 649-327-00-6	≤0,19	Asp. Tox. 1, H304 EUH066	-	[1] [2]
3-aminopropyltriethoxysilane	REACH #: 01-2119480479-24 EC: 213-048-4 CAS: 919-30-2 Index: 612-108-00-0	≤0,3	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317	ATE [Oral] = 500 mg/kg	[1]

SECTION 3: Composition/information on ingredients

Amines, tallow alkyl, ethoxylated	EC: 500-153-8 CAS: 61791-26-2	<0,25	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 See Section 16 for the full text of the H statements declared above.	ATE [Oral] = 500 mg/kg M [Acute] = 1 M [Chronic] = 1	[1]
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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

[2] Substance with a workplace exposure limit

This mixture contains $\geq 1\%$ of titanium dioxide. The Annex VI classification of titanium dioxide does not apply to this mixture according to Note 10.

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 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** : Flush contaminated skin with plenty of water. 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:
irritation
redness

SECTION 4: First aid measures

- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
- Skin contact** : No specific data.
- 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 European standard 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. 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. 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

SECTION 7: Handling and storage

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 tonne	500 tonne

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****Europe**

Product/ingredient name	Exposure limit values
Ethylacetate	EU OEL (Europe, 1/2022) STEL 15 minutes: 400 ppm. STEL 15 minutes: 1468 mg/m ³ . TWA 8 hours: 200 ppm. TWA 8 hours: 734 mg/m ³ .
hydrocarbons, C10-C13, n-/ iso-/ cyclo-alkanes, < 2% aromatics	Recommended by manufacturer (Europe, 2009) [hydrocarbons, C10-C13, n-/ iso-/ cyclo-alkanes, < 2% aromatics] TWA 8 hours: 1200 mg/m ³ ((184 ppm)). Form: Vapour.

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
n-butyl acetate	DNEL	Long term Dermal	7 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Oral	3,4 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Inhalation	960 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	960 mg/m ³	Workers	Local
	DNEL	Long term	480 mg/m ³	Workers	Systemic

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Ethylacetate	DNEL	Inhalation Long term	480 mg/m ³	Workers	Local
	DNEL	Inhalation Short term	859,7 mg/m ³	General population [Consumers]	Systemic
	DNEL	Inhalation Short term	859,7 mg/m ³	General population [Consumers]	Local
	DNEL	Inhalation Long term	102,34 mg/m ³	General population [Consumers]	Systemic
	DNEL	Inhalation Long term	102,34 mg/m ³	General population [Consumers]	Local
	DNEL	Dermal Long term	3,4 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Inhalation Short term	1468 mg/m ³	Workers	Local
	DNEL	Inhalation Short term	1468 mg/m ³	Workers	Systemic
	DNEL	Inhalation Long term	734 mg/m ³	Workers	Local
	DNEL	Inhalation Long term	34 mg/m ³	Workers	Systemic
	DNEL	Dermal Long term	63 mg/kg bw/day	Workers	Systemic
	DNEL	Inhalation Short term	734 mg/m ³	General population [Consumers]	Local
	DNEL	Inhalation Short term	734 mg/m ³	General population [Consumers]	Systemic
	DNEL	Inhalation Long term	367 mg/m ³	General population [Consumers]	Local
	DNEL	Inhalation Long term	367 mg/m ³	General population [Consumers]	Systemic
1-methoxy-2-propanol	DNEL	Dermal Long term	37 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Oral Long term	4,5 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Inhalation Short term	553,5 mg/m ³	Workers	Local
	DNEL	Inhalation Long term	369 mg/m ³	Workers	Systemic
	DNEL	Dermal Long term	50,6 mg/kg bw/day	Workers	Systemic
3-aminopropyltriethoxysilane	DNEL	Inhalation Long term	43,9 mg/m ³	General population [Consumers]	Systemic
	DNEL	Dermal Long term	18,1 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Oral Long term	3,3 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Dermal Short term	8,3 mg/kg	Workers	Systemic

SECTION 8: Exposure controls/personal protection

	DNEL	Short term Inhalation	bw/day 59 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	8,3 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	59 mg/m ³	Workers	Systemic
	DNEL	Short term Oral	5 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Dermal	5 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Inhalation	17,4 mg/m ³	General population [Consumers]	Systemic
	DNEL	Long term Oral	5 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Dermal	5 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	17 mg/m ³	General population [Consumers]	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
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	-
	Fresh water	0,33 mg/l	-
3-aminopropyltriethoxysilane	Marine	0,033 mg/l	-
	Sewage Treatment Plant	3,3 mg/l	-
	Fresh water sediment	0,26 mg/l	-
	Soil	0,04 mg/l	-
			-

8.2 Exposure controls

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.

SECTION 8: Exposure controls/personal protection

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: safety glasses with side-shields.

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 European Standard 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 : Grey. Red.
Odour : Solvent-like [Slight]
Odour threshold : Not available.

Melting point/freezing point : Not available.
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: 3%
 Upper: 18%

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

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

Decomposition temperature : Not available.

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 : 400 kPa (3000 mm Hg) [calculated.]

Evaporation rate : Not available.

Relative density : Not available.

Density : 0,86 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

SECTION 9: Physical and chemical properties**Median particle size** : Not applicable.**9.2 Other information****Heat of combustion** : 21,78 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 hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
n-butyl acetate	LC50 Inhalation Dusts and mists	Rat - Male, Female	23,4 mg/l	4 hours
	LC50 Inhalation Vapour	Rat	>21 mg/l	4 hours
	LC50 Inhalation Vapour	Rat	9700 mg/m ³	4 hours
	LD50 Oral	Rat	14000 mg/kg	-
Ethylacetate	LC50 Inhalation Vapour	Rat	>22,5 mg/l	6 hours
	LD50 Oral	Mouse	4100 mg/kg	-
	LD50 Oral	Rabbit	4935 mg/kg	-
	LD50 Oral	Rat	5620 mg/kg	-
1-methoxy-2-propanol	LC50 Inhalation Vapour	Rat	30,02 mg/l	4 hours
	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Mouse	11700 mg/kg	-
	LD50 Oral	Rat - Male, Female	4016 mg/kg	-
hydrocarbons, C10-C13, n-/iso-/ cyclo-alkanes, < 2% aromatics	LC50 Inhalation Vapour	Rat	5000 mg/m ³	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
	LC50 Inhalation Vapour	Rat - Female	>7350 mg/m ³	4 hours
3-aminopropyltriethoxysilane	LD50 Dermal	Rabbit	4,29 g/kg	-
	LD50 Dermal	Rabbit	4076 mg/kg	-
	LD50 Oral	Rat - Male	2,83 g/kg	-
	LD50 Oral	Rat - Female	1490 mg/kg	-
Amines, tallow alkyl, ethoxylated	LD50 Dermal	Rat	>10 g/kg	-
	LD50 Oral	Rat	500 mg/kg	-

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

SECTION 11: Toxicological informationAcute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
n-butyl acetate	N/A	N/A	N/A	N/A	23,4
3-aminopropyltriethoxysilane	500	N/A	N/A	N/A	N/A
Amines, tallow alkyl, ethoxylated	500	N/A	N/A	N/A	N/A

Irritation/Corrosion

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

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

Respiratory : May cause drowsiness or dizziness.

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
3-aminopropyltriethoxysilane	skin	Guinea pig	Sensitising

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

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

Mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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
n-butyl acetate	Category 3	-	Narcotic effects
Ethylacetate	Category 3	-	Narcotic effects
1-methoxy-2-propanol	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

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 : No known significant effects or critical hazards.

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

Skin contact : No known significant effects or critical hazards.

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

SECTION 11: Toxicological information**Symptoms related to the physical, chemical and toxicological characteristics**

Eye contact	: Adverse symptoms may include the following: irritation redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	: No specific data.
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	: Based on available data, the classification criteria are not met.
General	: No known significant effects or critical hazards.
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
n-butyl acetate Ethylacetate	Acute EC50 397 mg/l Fresh water	Algae - <i>Desmodesmus subspicatus</i>	72 hours
	Acute EC50 44 mg/l Fresh water	Daphnia spec.	48 hours
	Acute LC50 18 mg/l Fresh water	Fish - <i>Pimephales promelas</i>	96 hours
	Chronic NOEC 23 mg/l Fresh water	Daphnia spec.	21 days
	Acute EC50 5600 mg/l	Algae - <i>Scenedesmus subspicatus</i>	72 hours
	Acute EC50 165 mg/l Fresh water	Daphnia spec. - <i>Daphnia cucullata</i>	48 hours
	Acute LC50 230 mg/l Fresh water	Fish - <i>Pimephales promelas</i>	48 hours
	Chronic NOEC 2,4 mg/l Fresh water	Daphnia spec. - <i>Daphnia magna</i>	21 days

SECTION 12: Ecological information

1-methoxy-2-propanol	Chronic NOEC 6,9 mg/l Fresh water Acute EC50 >1000 mg/l	Fish - <i>Pimephales promelas</i> Algae - <i>Selenastrum capricornutum</i>	6,9 hours 7 days
hydrocarbons, C10-C13, n-/iso-/ cyclo-alkanes, < 2% aromatics	Acute EC50 23300 mg/l Acute LC50 6812 mg/l Fresh water Acute EC50 >1000 mg/l	Daphnia spec. Fish Daphnia spec.	96 hours 96 hours 4 hours
Amines, tallow alkyl, ethoxylated	Acute IC50 >1000 mg/l Acute LC50 >1000 mg/l Chronic EC50 0,17 mg/l Chronic LC50 0,13 mg/l	Algae Fish Daphnia spec. Fish	4 hours 4 hours 48 hours 96 hours

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

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
n-butyl acetate	- OECD 301D	90 % - Readily - 28 days 83 % - Readily - 28 days	-	-
Ethylacetate	-	80 % - 5 days	-	-
1-methoxy-2-propanol	OECD 301D OECD 301E OECD 301C -	70 % - Readily - 28 days 96 % - Readily - 28 days 88 to 92 % - Readily - 28 days >90 % - Readily - 5 days	- - - 1,95 gO ₂ /g ThOD	- - - -
3-aminopropyltriethoxysilane	EU 79/831 - C. 4-A	67 % - 28 days	-	-

Conclusion/Summary : Based on available data, the classification criteria are not met. This product has not been tested for biodegradation.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-butyl acetate	-	-	Readily
Ethylacetate	-	-	Readily
1-methoxy-2-propanol	Fresh water <28 days, 5 to 25°C	-	Readily
hydrocarbons, C10-C13, n-/iso-/ cyclo-alkanes, < 2% aromatics	Fresh water <28 days, 5 to 25°C	80%; < 28 day(s)	Readily
3-aminopropyltriethoxysilane	-	-	Inherent

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
n-butyl acetate	2,3	10	Low
Ethylacetate	0,68	30	Low
1-methoxy-2-propanol	<1	<100	Low
3-aminopropyltriethoxysilane	1,7	3,4	Low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : 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

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

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SECTION 12: Ecological information

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
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	Limited quantity 1L Special provisions 190, 327, 344, 625 Tunnel code (D)	Special provisions 190, 327, 344, 625 Remarks : ≤ 1L: Limited Quantity	Emergency schedules : F-D, S-U Special provisions 63, 190, 277, 327, 344, 381, 959 Remarks : ≤ 1L: Limited Quantity - IMDG 3.4	Quantity limitation Passenger and Cargo Aircraft: 75 kg. Packaging instructions: 203. Cargo Aircraft Only: 150 kg. Packaging instructions: 203. Limited Quantities - Passenger Aircraft: 30

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SECTION 14: Transport information

				kg. Packaging instructions: Y203. Special provisions A145, A167, A802
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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]
2169 & 2182 Hard-Hat® Primers	≥90	3

Labelling : Not applicable.

Other EU regulations

VOC : Exempt

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

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.

SECTION 15: Regulatory information**Aerosol dispensers** :**3**

Extremely flammable

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria**Category**

P3a

National regulations**Austria****VbF class** : Not regulated.**Storage code** : LGK2B**Classification, packaging and labelling** : Not available.**Limitation of the use of organic solvents** : Forbidden**Waste catalogue** : 59803

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

<u>Ingredient name</u>	<u>Status</u>
Cobalt et ses composés	Listed
Noirs de charbon	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, amending 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
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SECTION 15: Regulatory information

Bulgaria

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

- : I

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 dispensers EC 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

Executive Order No. 1795/2015

Ingredient name	Annex I Section A	Annex I Section B
titanium dioxide	Listed	-

Product registration number : Not available.

Fire class : I-1

MAL-code : 3-1

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

SECTION 15: Regulatory information

case, other recommended use of eye protection is not required.

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

MAL-code: 3-1

Application: When spraying in new* 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 half mask and eye protection must be worn.

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

- Air-supplied full mask and arm protectors 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.

- 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, coveralls 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	: This product contains low-boiling point liquids. Any respiratory protective equipment should be air-fed.
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	: Not listed

SECTION 15: Regulatory information

Carcinogenic waste	: Waste containers must be labeled: Contains a substance or substances regulated by Danish working environment legislation on cancer risks.
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
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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	: n-butyl acetate	RG 84
	Ethylacetate	RG 84
	1-methoxy-2-propanol	RG 84
	hydrocarbons, C10-C13, n-/ iso-/ cyclo-alkanes, < 2%	RG 84)
	aromatics	

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- 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: not 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
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Germany

TRGS 905

Ingredient name	Carcinogen	Mutagen	Reproductive toxicity - Fertility	Reproductive toxicity - Development
Cobalt compounds	K2	M1A	RF1A	RD1A

Storage class (TRGS 510) : 2B

Hazardous incident ordinance

This product is controlled under the Germany Hazardous Incident Ordinance.

Named substances

Name	Reference number

Danger criteria

Category	Reference number
P3a	1.2.3.1

Hazard class for water : 1

Technical instruction on air quality control (TA Luft)

Number [Class]	Description
5.2.1	Total dust
5.2.5	Organic substances
5.2.10	Soil polluting 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

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References	: Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
<u>Hungary</u>	
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
<u>Ireland</u>	
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
<u>Italy</u>	
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
<u>Latvia</u>	
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
<u>Lithuania</u>	
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
<u>Luxembourg</u>	
References	: -
<u>Malta</u>	
References	: -
<u>Netherlands</u>	
Ministry of Social Affairs and Employment (SZW) - Carcinogenic substances and processes, mutagenic or reprotoxic substances	

SECTION 15: Regulatory information

Ingredient name	Carcinogen	Mutagen	Reproductive toxicity - Fertility	Reproductive toxicity - Development	Harmful via breastfeeding
ethanol	Listed	-	Fertility 1A	Development 1A	Listed

Water Discharge Policy (ABM) : A(4) Low hazard for aquatic organisms, may have long-term hazardous effects in aquatic environment. Decontamination effort: A

Remark : Empty spraycans may be disposed of as ordinary solid non-hazardous waste.

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

SECTION 15: Regulatory information

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

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 : 200127*

Flammable liquid class (SRVFS 2005:10) : 1

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 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 : At least one component is not listed.
Turkey : At least one component is not listed.

SECTION 15: Regulatory information

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
Aerosol 1, H222, H229 STOT SE 3, H336	On basis of test data Calculation method

Full text of abbreviated H statements

Europe

Full text of abbreviated H statements	:	H222, H229 H225 H226 H302 H304 H314 H315 H317 H318 H319 H336 H400 H410 EUH066	Extremely flammable aerosol. Pressurised container: may burst if heated. Highly flammable liquid and vapour. Flammable liquid and vapour. Harmful if swallowed. May be fatal if swallowed and enters airways. Causes severe skin burns and eye damage. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Causes serious eye irritation. May cause drowsiness or dizziness. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. Repeated exposure may cause skin dryness or cracking.
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Full text of classifications [CLP/GHS]	:	Acute Tox. 4 Aerosol 1 Aquatic Acute 1 Aquatic Chronic 1 Asp. Tox. 1 Eye Dam. 1 Eye Irrit. 2 Flam. Liq. 2 Flam. Liq. 3 Skin Corr. 1B Skin Irrit. 2 Skin Sens. 1 STOT SE 3	ACUTE TOXICITY - Category 4 AEROSOLS - Category 1 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 ASPIRATION HAZARD - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 1B SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITISATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
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SECTION 16: Other information

Date of printing : 19/04/2024

Date of issue/ Date of revision : 19/04/2024

Date of previous issue : 19/04/2024

Version : 2

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.