

SAFETY DATA SHEET

RUST-OLEUM[®]
— INDUSTRIAL —

2180 Hard-Hat Galva Expresse

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

1.1 Product identifier

Product name : 2180 Hard-Hat Galva Expresse
Product description : Paint
Product type : Aerosol.
UFI : DKE1-T0S2-D007-4FHA
Product code : ROI0148

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	: State Fire and Rescue Service: 112. Ltd. "Riga Eastern Clinical University Hospital", Poisoning and Drug Information Center, Hipokrāta 2, Riga, Latvia, LV-1038; open 24 hours a day, tel. +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 (Only for the purpose of informing medical personnel in case of acute intoxications)
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

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

Telephone number Netherlands	:	+31 858880596
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

Aquatic Acute 1, H400

Aquatic Chronic 1, H410

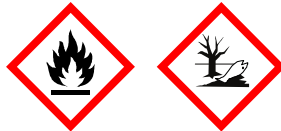
The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

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.
H410 - Very toxic to aquatic life with long lasting effects.

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.
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.
P273 - Avoid release to the environment.
P251 - Do not pierce or burn, even after use.

Response : P391 - Collect spillage.

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.

Supplemental label elements : EUH208 - Contains maleic anhydride. May produce an allergic reaction.

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.

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

Europe

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
dimethyl ether	REACH #: 01-2119472128-37 EC: 204-065-8 CAS: 115-10-6 Index: 603-019-00-8	≥25 - ≤50	Flam. Gas 1A, H220 Press. Gas (Comp.), H280	-	[2]
zinc powder, stabilized	REACH #: 01-2119467174-37 EC: 231-175-3 CAS: 7440-66-6 Index: 030-001-01-9	≥25 - ≤50	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
n-butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1	≤7,3	Flam. Liq. 3, H226 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	≤6,9	Flam. Liq. 3, H226 STOT SE 3, H336	-	[1] [2]

SECTION 3: Composition/information on ingredients

Ethylacetate	REACH #: 01-2119475103-46 EC: 205-500-4 CAS: 141-78-6 Index: 607-022-00-5	≤5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	-	[1] [2]
Quaternary ammonium compounds, C12-14 (even-numbered)-alkylethyldimethyl, ethyl sulphates	REACH #: 01-2119977130-42 EC: 939-607-9	<1	Acute Tox. 4, H302 Acute Tox. 3, H311 Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 500 mg/kg ATE [Dermal] = 300 mg/kg M [Acute] = 1 M [Chronic] = 10	[1]
2-methoxy-1-methylethyl acetate	EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7	<1	Flam. Liq. 3, H226 STOT SE 3, H336	-	[1] [2]
hydrocarbons, C10-C13, n-/iso-/ cyclo-alkanes, < 2% aromatics	REACH #: 01-2119457273-39 EC: 918-481-9 Index: 649-327-00-6	≤0,3	Asp. Tox. 1, H304	-	[1] [2]
lead powder [particle diameter < 1 mm]	EC: 231-100-4 CAS: 7439-92-1 Index: 082-013-00-1	<0,01	Repr. 1A, H360 Lact., H362 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	Repr. 1A: C ≥ 0,03% M [Acute] = 10 M [Chronic] = 100	[1] [2] [3]
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.	ATE [Oral] = 400 mg/kg Skin Sens. 1, H317: C ≥ 0,001%	[1]

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

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

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance with carcinogenic, mutagenic or reproductive toxicity properties

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. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

SECTION 4: First aid measures

- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

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
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : No specific data.
- Ingestion** : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

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

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- 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. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
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.

SECTION 5: Firefighting measures

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

6.2 Environmental precautions

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

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.
- 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

SECTION 7: Handling and storage

- 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. Avoid release to the environment. 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. 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 E1	150 tonnes 100 tonnes	500 tonnes 200 tonnes

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
dimethyl ether	EU OEL (Europe, 1/2022) TWA 8 hours: 1000 ppm. TWA 8 hours: 1920 mg/m ³ .
n-butyl acetate	EU OEL (Europe, 1/2022) STEL 15 minutes: 150 ppm. STEL 15 minutes: 723 mg/m ³ . TWA 8 hours: 241 mg/m ³ . TWA 8 hours: 50 ppm.
1-methoxy-2-propanol	EU OEL (Europe, 1/2022) Absorbed through skin. TWA 8 hours: 100 ppm. TWA 8 hours: 375 mg/m ³ . STEL 15 minutes: 150 ppm. STEL 15 minutes: 568 mg/m ³ .
Ethylacetate	EU OEL (Europe, 1/2022) STEL 15 minutes: 400 ppm.

SECTION 8: Exposure controls/personal protection

2-methoxy-1-methylethyl acetate	STEL 15 minutes: 1468 mg/m ³ . TWA 8 hours: 200 ppm. TWA 8 hours: 734 mg/m ³ . EU OEL (Europe, 1/2022) Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 275 mg/m ³ . STEL 15 minutes: 100 ppm. STEL 15 minutes: 550 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.
lead	EU Biological limit values (Europe, 3/2024) [lead and its inorganic compounds] OEL surveillance 8 hours: 0,015 mg/m ³ (lead). EU OEL (Europe, 3/2024) [lead and its inorganic compounds] Non-threshold reprotoxic substance.. TWA 8 hours: 0,03 mg/m ³ .

Product/ingredient name	Exposure indices
lead	EU Biological limit values (Europe, 3/2024) [lead and its inorganic compounds] BEI surveillance: 30 µg/100 ml, lead [in blood]. BLV: 70 µg/100 ml, lead [in blood]. BEI surveillance - females of reproductive capacity: 4,5 µg/100 ml, lead [in blood].

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	Result	Value	Effects
dimethyl ether	DNEL - General population - Long term - Inhalation	471 mg/m ³	<u>Effects:</u> Systemic
	DNEL - Workers - Long term - Inhalation	1894 mg/m ³	<u>Effects:</u> Systemic
zinc powder, stabilized	DNEL - Workers - Long term - Inhalation	5 mg/m ³	<u>Effects:</u> Local
	DNEL - Workers - Long term - Inhalation	2,5 mg/m ³	<u>Effects:</u> Local
	DNEL - Workers - Short term - Oral	50 mg/day	<u>Effects:</u> Local
	DNEL - Workers - Short term - Dermal	5000 mg/day	<u>Effects:</u> Local
	DNEL - Workers - Long term - Dermal	83 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - Workers - Long term -	5 mg/m ³	<u>Effects:</u>

SECTION 8: Exposure controls/personal protection

n-butyl acetate	Inhalation		Systemic
	DNEL - General population - Long term - Oral	0,83 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Long term - Inhalation	2,5 mg/m ³	Effects: Systemic
	DNEL - General population - Long term - Dermal	83 mg/kg bw/day	Effects: Systemic
	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/m ³	Effects: Systemic
	DNEL - Workers - Short term - Inhalation	960 mg/m ³	Effects: Local
	DNEL - Workers - Long term - Inhalation	480 mg/m ³	Effects: Systemic
	DNEL - Workers - Long term - Inhalation	480 mg/m ³	Effects: Local
	DNEL - General population - Consumers - Short term - Inhalation	859,7 mg/m ³	Effects: Systemic
	DNEL - General population - Consumers - Short term - Inhalation	859,7 mg/m ³	Effects: Local
	DNEL - General population - Consumers - Long term - Inhalation	102,34 mg/m ³	Effects: Systemic
	DNEL - General population - Consumers - Long term - Inhalation	102,34 mg/m ³	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	

SECTION 8: Exposure controls/personal protection

1-methoxy-2-propanol	DNEL - Workers - Short term - Dermal	11 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Long term - Inhalation	12 mg/m ³	Effects: Systemic
	DNEL - General population - Long term - Inhalation	35,7 mg/m ³	Effects: Local
	DNEL - Workers - Long term - Inhalation	48 mg/m ³	Effects: Systemic
	DNEL - General population - Short term - Inhalation	300 mg/m ³	Effects: Local
	DNEL - General population - Short term - Inhalation	300 mg/m ³	Effects: Systemic
	DNEL - Workers - Long term - Inhalation	300 mg/m ³	Effects: Local
	DNEL - Workers - Short term - Inhalation	600 mg/m ³	Effects: Local
	DNEL - Workers - Short term - Inhalation	600 mg/m ³	Effects: Systemic
	DNEL - Workers - Short term - Inhalation	553,5 mg/m ³	Effects: Local
	DNEL - Workers - Long term - Inhalation	369 mg/m ³	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/m ³	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
Ethylacetate	DNEL - Workers - Long term - Inhalation	369 mg/m ³	Effects: Systemic
	DNEL - Workers - Short term - Inhalation	553,5 mg/m ³	Effects: Systemic
	DNEL - Workers - Short term - Inhalation	1468 mg/m ³	Effects: Local
	DNEL - Workers - Short term - Inhalation	1468 mg/m ³	Effects: Systemic
	DNEL - Workers - Long term - Inhalation	734 mg/m ³	Effects: Local

SECTION 8: Exposure controls/personal protection

	DNEL - Workers - Long term - Inhalation	34 mg/m ³	<u>Effects:</u> Systemic
	DNEL - Workers - Long term - Dermal	63 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - General population - Consumers - Short term - Inhalation	734 mg/m ³	<u>Effects:</u> Local
	DNEL - General population - Consumers - Short term - Inhalation	734 mg/m ³	<u>Effects:</u> Systemic
	DNEL - General population - Consumers - Long term - Inhalation	367 mg/m ³	<u>Effects:</u> Local
	DNEL - General population - Consumers - Long term - Inhalation	367 mg/m ³	<u>Effects:</u> Systemic
	DNEL - General population - Consumers - Long term - Dermal	37 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - General population - Consumers - Long term - Oral	4,5 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - General population - Long term - Oral	4,5 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - General population - Long term - Dermal	37 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - Workers - Long term - Dermal	63 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - General population - Long term - Inhalation	367 mg/m ³	<u>Effects:</u> Local
	DNEL - General population - Long term - Inhalation	367 mg/m ³	<u>Effects:</u> Systemic
	DNEL - General population - Short term - Inhalation	734 mg/m ³	<u>Effects:</u> Local
	DNEL - General population - Short term - Inhalation	734 mg/m ³	<u>Effects:</u> Systemic
	DNEL - Workers - Long term - Inhalation	734 mg/m ³	<u>Effects:</u> Local
	DNEL - Workers - Long term - Inhalation	734 mg/m ³	<u>Effects:</u> Systemic
	DNEL - Workers - Short term - Inhalation	1468 mg/m ³	<u>Effects:</u> Local
	DNEL - Workers - Short term - Inhalation	1468 mg/m ³	<u>Effects:</u> Systemic
Quaternary ammonium compounds, C12-14	DNEL - General population -	0,98 mg/m ³	<u>Effects:</u>

SECTION 8: Exposure controls/personal protection

(even-numbered)-alkylethyldimethyl, ethyl sulphates	Long term - Inhalation		Systemic
	DNEL - General population - Long term - Oral	2,83 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - General population - Long term - Dermal	2,83 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - Workers - Long term - Inhalation	3,32 mg/m ³	<u>Effects:</u> Systemic
2-methoxy-1-methylethyl acetate	DNEL - Workers - Long term - Dermal	4,7 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - Workers - Long term - Inhalation	275 mg/m ³	<u>Effects:</u> Systemic
	DNEL - Workers - Long term - Dermal	153,5 mg/m ³	<u>Effects:</u> Systemic
	DNEL - General population - Consumers - Long term - Dermal	54,8 mg/m ³	<u>Effects:</u> Systemic
	DNEL - General population - Consumers - Long term - Oral	1,67 mg/m ³	<u>Effects:</u> Systemic
	DNEL - Workers - Long term - Dermal	796 mg/kg	<u>Effects:</u> Systemic
	DNEL - General population - Long term - Dermal	320 mg/kg	<u>Effects:</u> Systemic
	DNEL - General population - Long term - Oral	36 mg/kg	<u>Effects:</u> Systemic
	DNEL - General population - Long term - Inhalation	33 mg/m ³	<u>Effects:</u> Local
	DNEL - General population - Long term - Inhalation	33 mg/m ³	<u>Effects:</u> Systemic
maleic anhydride	DNEL - Workers - Short term - Inhalation	550 mg/m ³	<u>Effects:</u> Local
	DNEL - Workers - Short term - Inhalation	0,8 mg/m ³	<u>Effects:</u> Systemic
	DNEL - Workers - Short term - Dermal	0,04 mg/kg	<u>Effects:</u> Systemic
	DNEL - Workers - Long term - Inhalation	0,4 mg/m ³	<u>Effects:</u> Systemic
	DNEL - General population - Long term - Inhalation	0,05 mg/m ³	<u>Effects:</u> Systemic
	DNEL - General population - Long term - Oral	0,06 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - General population - Long term - Inhalation	0,08 mg/m ³	<u>Effects:</u> Local

SECTION 8: Exposure controls/personal protection

	DNEL - Workers - Long term - Inhalation	0,081 mg/m ³	<u>Effects:</u> Local
	DNEL - General population - Short term - Oral	0,1 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - General population - Short term - Dermal	0,1 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - General population - Long term - Dermal	0,1 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - Workers - Long term - Dermal	0,2 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - Workers - Short term - Inhalation	0,2 mg/m ³	<u>Effects:</u> Local

PNECs

Product/ingredient name	Result	Value	Remarks
zinc powder, stabilized	Fresh water	20,6 µg/l	-
	Marine	6,1 µg/l	-
	Sewage Treatment Plant	52 µg/l	-
	Fresh water sediment	118 mg/kg dwt	-
	Marine water sediment	56,5 mg/kg dwt	-
	Soil	35,6 mg/kg dwt	-
	Fresh water sediment	235,6 mg/kg dwt	-
	Marine water sediment	121 mg/kg dwt	-
	Soil	106,8 mg/kg dwt	-
	Sewage Treatment Plant	100 µg/l	-
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	-
1-methoxy-2-propanol	Sewage Treatment Plant	35,6 mg/l	-
	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	-

SECTION 8: Exposure controls/personal protection

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	-
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

Appropriate engineering controls

: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, 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: safety glasses with side-shields.

Skin protection

SECTION 8: Exposure controls/personal 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 (Type A) and 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.
Odour	: Hydrocarbon.
Odour threshold	: Not available.
Melting point/freezing point	: Not applicable.
Initial boiling point and boiling range	: Not available.

SECTION 9: Physical and chemical properties

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: 2,46% [Calculated (Le Chatelier mixture rule)]
Upper: 17,07% [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 : >1 (butyl acetate = 1) [Literature]

Relative density : Not available.

Density : 1,05 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.

9.2 Other information

Heat of combustion : 17,54 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	Value
dimethyl ether	Rat - Inhalation - LC50 Gas.	308000 mg/m ³ [1 hours]
	Mouse - Inhalation - LC50 Gas.	386 ppm [0,5 hours]
	Rat - Inhalation - LC50 Vapour	309 g/m ³ [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/m ³ [4 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]
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]
2-methoxy-1-methylethyl acetate	Rabbit - Dermal - LD50	>5 g/kg
	Rat - Inhalation - NOEL Dusts and mists	8100 mg/m ³ [4 hours]
hydrocarbons, C10-C13, n-/ iso-/ cyclo-alkanes, < 2% aromatics	Rat - Inhalation - LC50 Vapour	8500 mg/m ³ [4 hours]
maleic anhydride	Rat - Oral - LD50	400 mg/kg
	Rabbit - Dermal - LD50	2620 mg/kg

2180 Hard-Hat Galva Expresse

SECTION 11: Toxicological information

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)
2180 Hard-Hat Galva Expresse	N/A	39624,7	N/A	N/A	N/A
dimethyl ether	N/A	N/A	164000	309	N/A
Quaternary ammonium compounds, C12-14 (even-numbered)-alkylethyldimethyl, ethyl sulphates	500	300	N/A	N/A	N/A
maleic anhydride	400	2620	N/A	N/A	N/A

Skin corrosion/irritation

Product/ingredient name	Result	Exposure	Observation
zinc powder, stabilized	Human - Skin - Mild irritant	<u>Amount/concentration applied:</u> 300 ug l	-

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

Ingredient name

n-butyl acetate
1-methoxy-2-propanol
2-methoxy-1-methylethyl acetate

Conclusion/Summary

Non-irritating to the skin.
Non-irritating to the skin.
Non-irritating to the skin.

Serious eye damage/eye irritation

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

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

Ingredient name

n-butyl acetate
1-methoxy-2-propanol
2-methoxy-1-methylethyl acetate

Conclusion/Summary

Non-irritating to the eyes.
Non-irritating to the eyes.
Non-irritating to the eyes.

Respiratory corrosion/irritation

Not available.

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

Respiratory or skin sensitization

Not available.

Skin

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

Ingredient name

Conclusion/Summary

SECTION 11: Toxicological information

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.

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)
1-methoxy-2-propanol	STOT SE 3, H336 (Narcotic effects)
Ethylacetate	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	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: irritation redness
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SECTION 11: Toxicological information

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

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 [Product] : Not available.

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.

Conclusion/Summary [Product] : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species
zinc powder, stabilized	Acute - LC50 - Fresh water 107 µg/l [48 hours]	Daphnia spec. - Water flea
	Acute - EC50 - Fresh water 175 µg/l [96 hours]	Fish - Fathead minnow - Larvae
	Chronic - EC10 46,5 µg/l [21 days]	Daphnia spec. - Water flea - Neonate
	Chronic - EC10 - Fresh water 27,3 µg/l [72 hours]	Algae - Green algae - Exponential growth phase
	Acute - EC50 - Fresh water 106 µg/l [72 hours]	Algae - Green algae - Exponential growth phase
	Chronic - NOEC - Fresh water 172 µg/l [30 days]	Fish - Mottled sculpin - Young of the year
n-butyl acetate	Acute - EC50 - Fresh water 44 mg/l [48 hours]	Daphnia spec. - Daphnia spec.

SECTION 12: Ecological information

1-methoxy-2-propanol	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
	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.
Ethylacetate	Acute - EC50 >1000 mg/l [7 days]	Algae
	Acute - EC50 5600 mg/l [72 hours]	Algae - Algae
	Acute - EC50 - Fresh water 165 mg/l [48 hours]	Daphnia spec. - Water flea
	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
2-methoxy-1-methylethyl acetate	Chronic - NOEC - Fresh water 2,4 mg/l [21 days]	Daphnia spec. - Water flea
	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
	hydrocarbons, C10-C13, n-/ iso-/ cyclo-alkanes, < 2% aromatics	Acute - LC50 >1000 mg/l [4 hours]
Acute - EC50 >1000 mg/l [4 hours]		Daphnia spec.
Acute - IC50 >1000 mg/l [4 hours]		Algae
Acute - LC50 - Fresh water 530 µg/l [48 hours]		Crustaceans - Water flea
lead		

SECTION 12: Ecological information

maleic anhydride	Acute - LC50 - Fresh water 4500 µg/l [48 hours]	Crustaceans - Water flea
	Acute - LC50 - Fresh water 0,44 ppm [96 hours]	Fish - common carp - Juvenile (Fledgling, Hatchling, Weanling)
	Chronic - NOEC - Fresh water 0,03 µg/l [4 weeks]	Fish - common carp
	Acute - EC50 - Fresh water 20,5 µg/l [72 hours]	Algae - Green algae - Exponential growth phase
	Chronic - EC10 - Fresh water 3,9 µg/l [72 hours]	Algae - Green algae - Exponential growth phase
	Acute - LC50 - Fresh water 230 ppm [96 hours]	Fish - Western mosquitofish - Adult

Conclusion/Summary [Product] : Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Product/ingredient name	Test	Result
n-butyl acetate	-	90% [28 days] - Readily
	-	83% [28 days] - Readily
	-	80% [5 days]
1-methoxy-2-propanol	1,95 gO₂/g - ThOD	>90% [5 days] - Readily
	-	96% [28 days] - Readily
	-	88 to 92% [28 days] - Readily
Ethylacetate	-	70% [28 days] - Readily
2-methoxy-1-methylethyl acetate	-	100% [8 days] - Inherent

Conclusion/Summary [Product] : This product has not been tested for biodegradation.

Ingredient name

n-butyl acetate
hydrocarbons, C10-C13, n-/ iso-/ cyclo-
alkanes, < 2% aromatics

Conclusion/Summary

This product is readily biodegradable.
Rapidly lost by degradation and volatilisation.

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

12.3 Bioaccumulative potential

SECTION 12: Ecological information

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

12.4 Mobility in soil

Soil/water partition coefficient

Product/ingredient name	logKoc	Koc
dimethyl ether	0,44	2,76229
n-butyl acetate	1,5	33,2139
1-methoxy-2-propanol	1	10,447
Ethylacetate	1,3	18,1744
2-methoxy-1-methylethyl acetate	0,36	2,31363
maleic anhydride	1,1	11,4841

Results of PMT and vPvM assessment

Product/ingredient name	PMT	P	M	T	vPvM	vP	vM
dimethyl ether	No	No	No	No	No	No	No
zinc powder, stabilized	No	No	No	No	No	No	No
n-butyl acetate	No	No	No	No	No	No	No
1-methoxy-2-propanol	No	No	No	No	No	No	No
Ethylacetate	No	No	No	No	No	No	No
Quaternary ammonium compounds, C12-14 (even-numbered)-alkylethyldimethyl, ethyl sulphates	No	No	No	No	No	No	No
2-methoxy-1-methylethyl acetate	No	No	No	No	No	No	No
hydrocarbons, C10-C13, n-/iso-/ cyclo-alkanes, < 2% aromatics	No	No	No	No	No	No	No
lead powder [particle diameter < 1 mm]	No	No	No	No	No	No	No
maleic anhydride	No	No	No	No	No	No	No

Mobility : Volatile.

Conclusion/Summary : The product does not meet the criteria to be considered as a PMT or vPvM.

12.5 Results of PBT and vPvB assessment

Regulation (EC) No. 1907/2006 [REACH]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
dimethyl ether	No	N/A	N/A	No	N/A	N/A	N/A
zinc powder, stabilized	No	No	No	No	No	No	No
n-butyl acetate	No	N/A	No	No	No	N/A	No
1-methoxy-2-propanol	No	No	No	No	No	No	No
Ethylacetate	No	N/A	No	No	No	N/A	No
Quaternary ammonium compounds, C12-14 (even-numbered)-alkylethyldimethyl, ethyl sulphates	No	N/A	N/A	No	N/A	N/A	N/A
2-methoxy-1-methylethyl acetate	No	N/A	N/A	No	N/A	N/A	N/A

SECTION 12: Ecological information

hydrocarbons, C10-C13, n-/iso-/ cyclo-alkanes, < 2% aromatics	No	No	N/A	No	No	No	N/A
lead powder [particle diameter < 1 mm]	No	No	No	No	No	No	No
maleic anhydride	N/A	N/A	N/A	Yes	N/A	N/A	N/A

Regulation (EC) No. 1272/2008 [CLP]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
dimethyl ether	No	No	No	No	No	No	No
zinc powder, stabilized	No	No	No	No	No	No	No
n-butyl acetate	No	No	No	No	No	No	No
1-methoxy-2-propanol	No	No	No	No	No	No	No
Ethylacetate	No	No	No	No	No	No	No
Quaternary ammonium compounds, C12-14 (even-numbered)-alkylethyldimethyl, ethyl sulphates	No	No	No	No	No	No	No
2-methoxy-1-methylethyl acetate	No	No	No	No	No	No	No
hydrocarbons, C10-C13, n-/iso-/ cyclo-alkanes, < 2% aromatics	No	No	No	No	No	No	No
lead powder [particle diameter < 1 mm]	No	No	No	No	No	No	No
maleic anhydride	No	No	No	No	No	No	No

Conclusion/Summary Regulation (EC) No. 1272/2008 [CLP] : The product does not meet the criteria to be considered as a PBT or vPvB.

12.6 Endocrine disrupting properties

Not available.

Conclusion/Summary [Product] : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

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)








2180 Hard-Hat Galva Expresse

SECTION 13: Disposal considerations

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	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Additional information ADR

The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

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

The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Limited quantity	: 1L
Classification code	: 5F
Special provisions	: 190, 327, 344, 625

Additional information IMDG

The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Limited quantity	: 1L
Emergency schedules	: F-D, S-U

SECTION 14: Transport information

- 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

The environmentally hazardous substance mark may appear if required by other transportation regulations.

- 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

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

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
Toxic to reproduction	lead	Candidate	-	-

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

Product/ingredient name	%	Designation [Usage]
2180 Hard-Hat Galva Expresse	≥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
- VOC for Ready-for-Use Mixture** : Exempt

SECTION 15: Regulatory information

Industrial emissions (integrated pollution prevention and control) - Air : Listed

Industrial emissions (integrated pollution prevention and control) - Water : Listed

Explosive precursors : Not applicable.

Ozone depleting substances (EU 2024/590)

Not listed.

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

Not listed.

Persistent Organic Pollutants (850/2004/EC)

Not listed.

Aerosol dispensers :

3



Extremely flammable

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category
P3a E1

National regulations

Product/ingredient name	List name	Name on list	Classification	Notes
-	EU OEL	lead powder [particle diameter < 1 mm]	Non-threshold reprotoxic substance.	lead

Austria

VbF class : Category 1

Storage code : LGK 2B

Classification, packaging and labelling : Not available.

Limitation of the use of organic solvents : Permitted.

Waste catalogue : 59803

SECTION 15: Regulatory information

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

Belgium

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

Ingredient name	Status
Plomb et ses composés inorganiques	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 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
 REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

Bulgaria

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

SECTION 15: Regulatory information

management, Act No. 258/2000 Coll. on public health, Government Regulation No. 361/2007 Coll., establishing the conditions for health protection at work, Act No. 201/2012 Coll., on air protection and related decrees, Act No. 477/2001 Coll. on packaging, Decree No. 48/1982 Coll., which establishes basic requirements to ensure the safety of work and technical equipment, communication No. 8/2013 Coll. m.s. (ADR), notice No. 23/2013 Coll. (RID), Czech state standards REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

Denmark

Product registration number

: Not available.

Fire class

: I-1

Denmark – Cancer risks

: Not listed

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 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.

SECTION 15: Regulatory information

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
Carcinogenic waste	: Not applicable.
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
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SECTION 15: Regulatory information

materials.

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

Finland

- NACE** : Not available.
- UC62** : Not available.
- References** : Regulation of the Ministry of Social Affairs and Health on occupational exposure limit values 795/2007
 Aerosol regulation amendment 805/1994
 Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
 REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

France

- Social Security Code, Articles L 461-1 to L 461-7** : dimethyl ether RG 84
 n-butyl acetate RG 84
 1-methoxy-2-propanol RG 84
 Ethylacetate RG 84
 2-methoxy-1-methylethyl acetate RG 84
 hydrocarbons, C10-C13, n-/ iso-/ cyclo-alkanes, < 2% RG 84
 aromatics
 butan-1-ol RG 84
 lead powder [particle diameter < 1 mm] RG 1
 maleic anhydride RG 66

Classified installations for environmental protection : Not available.

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

Remark : Not available.

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

Germany

Storage class (TRGS 510) : 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
E1	1.3.1

SECTION 15: Regulatory information

Hazard class for water : 3

Technical instruction on air quality control (TA Luft)

Number [Class]	Description
5.2.1	Total dust
5.2.2 [III]	Dusty inorganic substances
5.2.5	Organic substances
5.2.5 [I]	Organic substances

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

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

Greece

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

Hungary

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

Ireland

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

Italy

D.Lgs. 152/06 : Not determined.

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

Latvia

SECTION 15: Regulatory information

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

Lithuania

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

Luxembourg

References : -

Malta

References : -

Netherlands

Ministry of Social Affairs and Employment (SZW) - Carcinogenic substances and processes, mutagenic or reprotoxic substances

Ingredient name	Carcinogen	Mutagen	Reproductive toxicity - Fertility	Reproductive toxicity - Development	Harmful via breastfeeding
aluminiumverbindingen, oplosbaar	-	-	-	Development 1B	Listed

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

Remark : Empty sprycans 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

SECTION 15: Regulatory information

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

Romania

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

Slovakia

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

Slovenia

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

Spain

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 : 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

2180 Hard-Hat Galva Expresse

SECTION 15: Regulatory information

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	: Not determined.
China	: Not determined.
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	: Not determined.
Philippines	: Not determined.
Republic of Korea	: At least one component is not listed.
Taiwan	: Not determined.
Thailand	: At least one component is not listed.
Turkey	: Not determined.
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 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
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Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Aerosol 1, H222, H229 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	On basis of test data Calculation method Calculation method

Full text of abbreviated H statements

Europe

SECTION 16: Other information

Full text of abbreviated H statements	:	<p>H220 Extremely flammable gas.</p> <p>H222, H229 Extremely flammable aerosol. Pressurised container: may burst if heated.</p> <p>H225 Highly flammable liquid and vapour.</p> <p>H226 Flammable liquid and vapour.</p> <p>H280 Contains gas under pressure; may explode if heated.</p> <p>H302 Harmful if swallowed.</p> <p>H304 May be fatal if swallowed and enters airways.</p> <p>H311 Toxic in contact with skin.</p> <p>H314 Causes severe skin burns and eye damage.</p> <p>H317 May cause an allergic skin reaction.</p> <p>H318 Causes serious eye damage.</p> <p>H319 Causes serious eye irritation.</p> <p>H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.</p> <p>H336 May cause drowsiness or dizziness.</p> <p>H360 May damage fertility or the unborn child.</p> <p>H362 May cause harm to breast-fed children.</p> <p>H372 Causes damage to organs through prolonged or repeated exposure.</p> <p>H400 Very toxic to aquatic life.</p> <p>H410 Very toxic to aquatic life with long lasting effects.</p> <p>EUH066 Repeated exposure may cause skin dryness or cracking.</p> <p>EUH071 Corrosive to the respiratory tract.</p>
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Full text of classifications [CLP/GHS]	:	<p>Acute Tox. 3 ACUTE TOXICITY - Category 3</p> <p>Acute Tox. 4 ACUTE TOXICITY - Category 4</p> <p>Aerosol 1 AEROSOLS - Category 1</p> <p>Aquatic Acute 1 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1</p> <p>Aquatic Chronic 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1</p> <p>Asp. Tox. 1 ASPIRATION HAZARD - Category 1</p> <p>Eye Dam. 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1</p> <p>Eye Irrit. 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2</p> <p>Flam. Gas 1A FLAMMABLE GASES - Category 1A</p> <p>Flam. Liq. 2 FLAMMABLE LIQUIDS - Category 2</p> <p>Flam. Liq. 3 FLAMMABLE LIQUIDS - Category 3</p> <p>Lact. REPRODUCTIVE TOXICITY - Effects on or via lactation</p> <p>Press. Gas (Comp.) GASES UNDER PRESSURE - Compressed gas</p> <p>Repr. 1A REPRODUCTIVE TOXICITY - Category 1A</p> <p>Resp. Sens. 1 RESPIRATORY SENSITISATION - Category 1</p> <p>Skin Corr. 1B SKIN CORROSION/IRRITATION - Category 1B</p> <p>Skin Corr. 1C SKIN CORROSION/IRRITATION - Category 1C</p> <p>Skin Sens. 1A SKIN SENSITISATION - Category 1A</p> <p>STOT RE 1 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1</p> <p>STOT SE 3 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3</p>
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Notice to reader

SECTION 16: Other information

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.