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1. IDENTIFICATION OF THE SUBSTRATE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name/designation: Euroroof SA Primer - Spray applied.

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

Relevant identified uses: Primer / Adhesive.

1.3 Supplier details

Alumasc Building Products Ltd

White House Works, Bold Road, Sutton, St Helens, Merseyside, United Kingdom, WA9 4JG

Tel: +44 (0)1744 648400

e-mail: technical@alumascroofing.com

1.4 Emergency telephone number

Association / Organisation:National Poisons Information Service
Emergency telephone numbers:0344 892 0111 (Healthcare professionals only)
Other emergency telephone numbersAlumasc Building Products: +44 17 4464 8400
(Mon-Thurs – 08.30-17.00 Fri – 08.30-16.00)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Considered a hazardous mixture according to Reg. (EC) No 1272/2008 and their amendments. Classified as Dangerous Goods for transport purposes.

Classification according to Regulation (EC) No. 1272/2008 [CLP][1]:

H226 - Flammable Liquids Category 3, H336 - Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) Category 3, H411 – Hazardous to the Aquatic Environment Long-Term Hazard Category 2, H372 - Specific Target Organ Toxicity - Repeated Exposure Category 1, H304 - Aspiration Hazard Category 1.

Legend:

1. Classified by Chemwatch; 2. Classification drawn from GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567.

2.2 Label elements

Hazard pictures:







Signal word: Danger.

Hazard statements: H336 May cause drowsiness or dizziness.

H315 Causes skin irritation. H319 Causes serious eye irritation. H351 Suspected of causing cancer.

H222+H229 Extremely flammable aerosol. Pressurized container: may burst if heated.

Supplementary statements: EUH044 Risk of explosion if heated under confinement.

Precautionary statements prevention: P202 Do not handle until all safety precautions have been read and understood.

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.

P251 Do not pierce or burn, even after use P261 Avoid breathing vapour/spray

P264 Wash contaminated skin thoroughly after handling P271 Use only outdoors or in a well-ventilated area

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection

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Precautionary statements response: P308+P313 IF exposed or concerned: Get medical advice/ attention.

P312 Call a POISON CENTER/ doctor if you feel unwell P321 Specific treatment (see advice on this label).

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P302+P352 IF ON SKIN: Wash with plenty of water

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for

breathing

P362+P364 Take off contaminated clothing and wash it before reuse

Precautionary statements storage: P405 Store locked up.

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

122 °F.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Precautionary statements disposal: P501: Dispose of contents/container to an authorised hazardous or special waste

collection point in accordance with any local regulation.

2.3 Other hazards

Methylene Chloride: Listed in the Europe Regulation (EC) No 1907/2006 - Annex XVII (Restrictions may apply). Dimethyl Ether: Listed in the Europe Regulation (EC) No 1907/2006 - Annex XVII (Restrictions may apply).

3. COMPOSITION AND INFORMATION ABOUT THE COMPONENTS

3.1 Substances

See 'Composition on ingredients' in Section 3.2.

3.2 Mixtures

1. CAS No 2. EC No 3. Index No 4. REACH No	% [weight]	Name	Classified according to GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567	Nanoform Particle Characteristics
1. 75-09-2 2. 200-838-9 3. 602-004-00-3 4. Not available	30-60	Methylene Chloride *	Carcinogenicity Category 2; H351 [2]	Not available
1. 68476-85-7 2. 270-704-2 3. 649-202-00-6 4. Not available	10-30	LPG (Liquefied Petroleum Gas)	Flammable Gas Category 1, Gas under Pressure (Liquefied gas); H220, H280, EUH044 [1]	Not available
1. 115-10-6 2. 204-065-8 3. 603-019-00-8 4. Not available	5-10	Dimethyl Ether *	Flammable Gas Category 1, Gas under Pressure; H220, H280 [2]	Not available
Legend:	and UK	1. Classified by Chemwatch; 2. Classification drawn from GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567; 3. Classification drawn from C&L * EU IOELVs available; [e] Substance identified as having endocrine disrupting properties		

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4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact: If product comes in contact with eyes remove the patient from gas source or contaminated area.

Take the patient to the nearest eye wash, shower or other source of clean water.

Open the eyelid(s) wide to allow the material to evaporate.

Gently rinse the affected eye(s) with clean, cool water for at least 15 minutes. Have the patient lie or sit down and tilt the head back. Hold the eyelid(s) open and pour water slowly over the eyeball(s) at the inner corners, letting the water run out of the outer corners.

The patient may be in great pain and wish to keep the eyes closed. It is important that the material is rinsed from the eyes to prevent further damage.

Ensure that the patient looks up, and side to side as the eye is rinsed in order to better reach all parts of the eye(s).

Transport to hospital or doctor.

Even when no pain persists and vision is good, a doctor should examine the eye as delayed damage may

If the patient cannot tolerate light, protect the eyes with a clean, loosely tied bandage.

Ensure verbal communication and physical contact with the patient.

DO NOT allow the patient to rub the eyes.

DO NOT allow the patient to tightly shut the eyes.

DO NOT introduce oil or ointment into the eye(s) without medical advice.

DO NOT use hot or tepid water.

Skin contact: If skin contact occurs:

Immediately flush body and clothes with large amounts of water, using safety shower if available.

Quickly remove all contaminated clothing, including footwear.

Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons

Information Centre.

Transport to hospital, or doctor.

Inhalation: Following exposure to gas, remove the patient from the gas source or contaminated area.

NOTE: Personal Protective Equipment (PPE), including positive pressure self-contained breathing apparatus

may be required to assure the safety of the rescuer.

Prostheses such as false teeth, which may block the airway, should be removed, where possible, prior to

initiating first aid procedures.

If the patient is not breathing spontaneously, administer rescue breathing.

If the patient does not have a pulse, administer CPR.

If medical oxygen and appropriately trained personnel are available, administer 100% oxygen.

Summon an emergency ambulance. If an ambulance is not available, contact a physician, hospital, or

Poison Control Centre for further instruction.

Keep the patient warm, comfortable and at rest while awaiting medical care.

MONITOR THE BREATHING AND PULSE, CONTINUOUSLY.

Administer rescue breathing (preferably with a demand-valve resuscitator, bag-valve mask-device, or

pocket mask as trained) or CPR if necessary.

Ingestion: Not considered a normal route of entry.

Avoid giving milk or oils. Avoid giving alcohol.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11.

4.3 Indication of any immediate medical attention and special treatment needed

For intoxication due to Freons/ Halons;

A: Emergency and Supportive Measures:

- Maintain an open airway and assist ventilation if necessary.
- Treat coma and arrhythmias if they occur. Avoid (adrenaline) epinephrine or other sympathomimetic amines that may precipitate ventricular arrhythmias. Tachyarrhythmias caused by increased myocardial sensitisation may be treated with propranolol, 1-2 mg IV or esmolol 25-100 microgm/kg/min IV.
- Monitor the ECG for 4-6 hours.

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B: Specific drugs and antidotes:

- There is no specific antidote.

C: Decontamination:

- Inhalation; remove victim from exposure, and give supplemental oxygen if available.
- Ingestion; (a) Prehospital: Administer activated charcoal, if available. DO NOT induce vomiting because of rapid absorption and the risk of abrupt onset CNS depression. (b)
- Hospital: Administer activated charcoal, although the efficacy of charcoal is unknown. Perform gastric lavage only if the ingestion was very large and recent (less than 30 minutes).

D: Enhanced elimination:

- There is no documented efficacy for diuresis, haemodialysis, haemoperfusion, or repeat-dose charcoal.

POISONING and DRUG OVERDOSE, Californian Poison Control System Ed. Kent R Olson; 3rd Edition

- Do not administer sympathomimetic drugs unless absolutely necessary as material may increase myocardial irritability.
- No specific antidote.
- Because rapid absorption may occur through lungs if aspirated and cause systematic effects, the decision of whether to induce vomiting or not should be made by an attending physician.
- If lavage is performed, suggest endotracheal and/or esophageal control.
- Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach.
- Treatment based on judgment of the physician in response to reactions of the patient.

For frost-bite caused by liquefied petroleum gas:

- If part has not thawed, place in warm water bath (41-46 C) for 15-20 minutes, until the skin turns pink or red.
- Analgesia may be necessary while thawing.
- If there has been a massive exposure, the general body temperature must be depressed, and the patient must be immediately rewarmed by whole-body immersion, in a bath at the above temperature.
- Shock may occur during rewarming.
- Administer tetanus toxoid booster after hospitalization.
- Prophylactic antibiotics may be useful.
- The patient may require anticoagulants and oxygen.

[Shell Australia 22/12/87]

For gas exposures:

Basic treatment:

- Establish a patent airway with suction where necessary.
- Watch for signs of respiratory insufficiency and assist ventilation as necessary.
- Administer oxygen by non-rebreather mask at 10 to 15 l/min.
- Monitor and treat, where necessary, for pulmonary oedema.
- Monitor and treat, where necessary, for shock.
- Anticipate seizures.

Advanced treatment:

- Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has
- Positive-pressure ventilation using a bag-valve mask might be of use.
- Monitor and treat, where necessary, for arrhythmias.
- Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.
- Drug therapy should be considered for pulmonary oedema.
- Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.
- Treat seizures with diazepam.
- Proparacaine hydrochloride should be used to assist eye irrigation.

BRONSTEIN, A.C. and CURRANCE, P.L.

EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

5. FIRE-FIGHTING MEASSURES

5.1 Extinguishing media

DO NOT EXTINGUISH BURNING GAS UNLESS THE LEAK CAN BE STOPPED SAFELY: OTHERWISE: LEAVE GAS TO BURN.

For small fire:

Dry chemical, CO2 or water spray to extinguish gas (only if absolutely necessary and safe to do so). DO NOT use water jets.

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5.2 Special hazards arising from the substance or mixture

Fire incompatibility:

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

5.3 Advice for fire-fighters

Fire-fighting:

For fires involving many gas cylinders:

- To stop the flow of gas, specifically trained personnel may inert the atmosphere to reduce oxygen levels thus allowing the capping of leaking container(s).
- Reduce the rate of flow and inject an inert gas, if possible, before completely stopping the flow to prevent flashback.
- DO NOT extinguish the fire until the supply is shut off otherwise an explosive re-ignition may occur.

General:

- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.

Fire/explosion hazard:

- HIGHLY FLAMMABLE: will be easily ignited by heat, sparks or flames.
- Will form explosive mixtures with air
- Fire exposed containers may vent contents through pressure relief valves thereby increasing fire intensity and/ or vapour concentration.

Vapours may travel to source of ignition and flash back.

Combustion products include:

- Carbon monoxide (CO)
- Carbon dioxide (CO2)
- Hydrogen chloride
- Phosgene
- Other pyrolysis products typical of burning organic material.

Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.

6. ACCIDENTIAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See Section 8.

6.2 Environmental precautions

See Section 12.

6.3 Methods and material for containment and cleaning up

Minor spills:

- Avoid breathing vapour and any contact with liquid or gas. Protective equipment including respirator should be used.
- DO NOT enter confined spaces where gas may have accumulated.

Major spills:

- Clear area of all unprotected personnel and move upwind.
- Alert Emergency Authority and advise them of the location and nature of hazard.
- May be violently or explosively reactive.
- Remove leaking cylinders to a safe place.
- Fit vent pipes. Release pressure under safe, controlled conditions
- Burn issuing gas at vent pipes.
- DO NOT exert excessive pressure on valve; DO NOT attempt to operate damaged valve.

6.4 Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the SDS.

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7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Safe handling:

Consider use in closed pressurised systems, fitted with temperature, pressure and safety relief valves which are vented for safe dispersal. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. The tubing network design connecting gas cylinders to the delivery system should include appropriate pressure indicators and vacuum or suction lines.

Fully-welded types of pressure gauges, where the bourdon tube sensing element is welded to the gauge body, are recommended.

Avoid generation of static electricity. Earth all lines and equipment.

DO NOT transfer gas from one cylinder to another.

Fire & explosion protection:

See Section 5.

Other information:

Cylinders should be stored in a purpose-built compound with good ventilation, preferably in the open.

Such compounds should be sited and built in accordance with statutory requirements.

The storage compound should be kept clear and access restricted to authorised personnel only.

7.2 Conditions for safe storage, including any incompatibilities

Suitable container:

DO NOT use aluminium or galvanised containers

Cylinder:

Ensure the use of equipment rated for cylinder pressure.

Ensure the use of compatible materials of construction.

Valve protection cap to be in place until cylinder is secured, connected.

Storage incompatibility:

Dimethyl Ether:

- Is a peroxidisable gas.
- May be heat and shock sensitive.
- Is able to form unstable peroxides on prolonged exposure to air.
- Reacts violently with oxidisers, aluminium hydride, lithium aluminium hydride.
- Is incompatible with strong acids, metal salts.

Methylene Chloride

- Is a combustible liquid under certain circumstances even though there is no measurable flash point and it is difficult to ianite.
- It is flammable in ambient air in the range 12-23%; increased oxygen content can greatly enhance fire and explosion potential
- Contact with hot surfaces and elevated temperatures can form fumes of hydrogen chloride and phosgene
- Reacts violently with active metals, aluminium, lithium, methanol,, peroxydisulfuryl difluoride, potassium, potassium tert-butoxide, sodium.
- Forms explosive mixtures with nitric acid.
- Is incompatible with strong oxidisers, strong caustics, alkaline earths and alkali metals.
- Attacks some plastics, coatings and rubber.
- May generate electrostatic charge due to low conductivity.

Low Molecular Weight Alkanes:

- May react violently with strong oxidisers, chlorine, chlorine dioxide, dioxygenyl tetrafluoroborate.
- May react with oxidising materials, nickel carbonyl in the presence of oxygen, heat.
- Are incompatible with nitronium tetrafluoroborate(1-), halogens and interhalogens
- May generate electrostatic charges, due to low conductivity, on flow or agitation.

Propane:

- Reacts violently with strong oxidisers, barium peroxide, chlorine dioxide, dichlorine oxide, fluorine etc.
- Liquid attacks some plastics, rubber and coatings
- May accumulate static charges which may ignite its vapours
- Segregate from alcohol, water.
- Avoid reaction with oxidising agents.

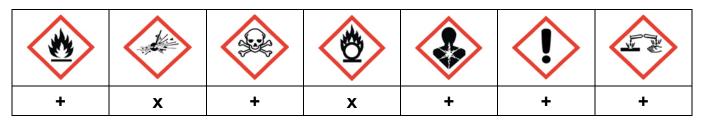
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Compressed gases may contain a large amount of kinetic energy over and above that potentially available from the energy of reaction produced by the gas in chemical reaction with other substances



- **X** Must not be stored together.
- **O** May be stored together with specific preventions.
- + May be stored together.

Note: Depending on other risk factors, compatibility assessment based on the table above may not be relevant to storage situations, particularly where large volumes of dangerous goods are stored and handled. Reference should be made to the Safety Data Sheets for each substance or article and risks assessed accordingly.

7.3 Specific end uses(s)

See Section 1.2.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Ingredient	DNELs Exposure Pattern Worker	PNECs Compartment
Methylene Chloride:	Dermal 12 mg/kg bw/day (Systemic, Chronic) Inhalation 176 mg/m³ (Systemic, Chronic) Dermal 5.82 mg/kg bw/day (Systemic, Chronic) * Inhalation 44 mg/m³ (Systemic, Chronic) * Oral 0.06 mg/kg bw/day (Systemic, Chronic) *	0.31 mg/L (Water (Fresh)) 0.031 mg/L (Water - Intermittent release) 0.27 mg/L (Water (Marine)) 2.57 mg/kg sediment dw (Sediment (Fresh Water)) 0.26 mg/kg sediment dw (Sediment (Marine)) 0.33 mg/kg soil dw (Soil) 26 mg/L (STP)
LPG (Liquefied Petroleum Gas):	Dermal 23.4 mg/kg bw/day (Systemic, Chronic)	Not available
Dimethyl Ether:	Inhalation 1 894 mg/m³ (Systemic, Chronic) Inhalation 471 mg/m³ (Systemic, Chronic) *	0.155 mg/L (Water (Fresh)) 0.016 mg/L (Water - Intermittent release) 1.549 mg/L (Water (Marine)) 0.681 mg/kg sediment dw (Sediment (Fresh Water)) 0.069 mg/kg sediment dw (Sediment (Marine)) 0.045 mg/kg soil dw (Soil) 160 mg/L (STP)

^{*} Values for general population.

Occupational Exposure Limits (OEL):

Ingredient data:

ingreaient aata:						
Source	Ingredient	Material name	TWA	STEL	Peak	Notes
EU Consolidated List of Indicative Occupational Exposure Limit Values (IOELVs)	Methylene Chloride	Methylene chloride; Dichloromethane	100 ppm / 353 mg/m3	706 mg/m3 / 200 ppm	Not available	skin
UK Workplace Exposure Limits (WELs)	Methylene Chloride	Dichloromethane	100 ppm / 353 mg/m3	706 mg/m3 / 200 ppm	Not available	BMGV, Sk

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UK Workplace Exposure Limits (WELs)	LPG (Liquefied Petroleum Gas)	Liquefied petroleum gas	1000 ppm / 1750 mg/m3	2180 mg/m3 / 1250 ppm	Not available	Carc (only applies if LPG contains more than 0.1% of buta- 1,3- diene)
EU Consolidated List of Indicative Occupational Exposure Limit Values (IOELVs)	Dimethyl Ether	Dimethyl ether	1000 ppm / 1920 mg/m3	Not available	Not available	Not available
UK Workplace Exposure Limits (WELs)	Dimethyl Ether	Dimethyl ether	400 ppm / 766 mg/m3	958 mg/m3 / 500 ppm	Not available	Not available

Emergency limits:

Ingredient	TEEL-1	TEEL-2	TEEL-3
Methylene Chloride	Not available	Not available	Not available
LPG (Liquefied Petroleum Gas)	65,000 ppm	2.30E+05 ppm	4.00E+05 ppm
Dimethyl Ether	3,000 ppm	3800* ppm	7200* ppm

Ingredient	Original IDLH	Revised IDLH
Methylene Chloride	2,300 ppm	Not available
LPG (Liquefied Petroleum Gas)	2,000 ppm	Not available
Dimethyl Ether	Not available	Not available

8.2 Exposure controls

8.2.1. Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk.
8.2.2. Personal protection	
Eye and face protection:	Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.
Skin protection:	See Hand Protection below.
Hands/feet protection:	When handling sealed and suitably insulated cylinders wear cloth or leather gloves. Viton rubber (fluro rubber). The selected gloves should have a breakthrough time of at least 2 hours. Minimum thickness:0.7mm.
Body protection:	See Other Protection below.

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	The clothing worn by process operators insulated from earth may develop static charges far higher (up to 100 times) than the minimum ignition energies for various flammable gas-air mixtures. This holds true for a wide range of clothing materials including cotton. Avoid dangerous levels of charge by ensuring a low resistivity of the surface material worn outermost. Protective overalls, closely fitted at neck and wrist.
Other protection:	Eye-wash unit. IN CONFINED SPACES: Non-sparking protective boots Static-free clothing. Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static
	electricity. For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets). Non sparking safety or conductive footwear should be considered.

Recommended material(s):

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the computer generated selection: Euroroof Spray SA Primer

Material	CPI	Materia	CPI
BUTYL	С	PVA	С
CPE	С	TEFLON	С
NATURAL RUBBER	С	VITON	С
NEOPRENE	С	VITON/BUTYL	С
PE/EVAL/PE	С	VITON/CHLOROBUTYL	С

^{*} CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

Respiratory protection:

Type AX Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

- Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used Positive pressure, full face, air-supplied breathing apparatus should be used for work in enclosed spaces if a leak is suspected or the primary containment is to be opened (e.g. for a cylinder change)
- Air-supplied breathing apparatus is required where release of gas from primary containment is either suspected or demonstrated.

8.2.3. Environmental exposure controls

See Section 12.

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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Important health, safety and environmental information

Appearance:

Physical state:

Odour:

Chlorinated hydrocarbons

Not available

PH (as supplied):

Melting point/freezing point (°C):

Initial boiling point and boiling

Black

Aerosol

Chlorinated hydrocarbons

Not available

Not available

Not applicable

range (°C):

Flash point (°C):

Not available

Evaporation rate: 27.5 BUAC = 1

Flammability:

Upper Explosive Limit (%):

Lower Explosive Limit (%):

Vapour pressure (kPa):

Not available

Not available

Not available

Vapour pressure (KPa):

Solubility in water:

Vapour density (Air = 1):

Not available

Not available

Not available

Particle Size:

Not available

Relative density (Water = 1): 1.15-1.20

Partition coefficient n-octanol/water: Not available

Auto-ignition temperature (°C): Not available

Decomposition temperature: Not available

Viscosity (cSt): 750.000-1250.000

Molecular weight (g/mol): Not available

Taste: Not available In use may form

Explosive properties: flammable/ explosive vapour-air mixture

Oxidising properties:

Does not meet criteria for classification as oxidising

Surface Tension (dyn/cm or mN/m): Not available Volatile Component (%vol): Not available Gas group: Not available pH as a solution (1%): Not available

VOC g/L: Not available
Nanoform Particle Characteristics: Not available
1.15-1.20

9.2 Other information

This product contains a maximum VOC content of 78%.

10. STABILITY AND REACTIVITY

10.1 Reactivity

See Section 7.2.

10.2 Chemical stability

Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur. Highly volatile.

10.3 Possibility of hazardous reactions

See Section 7.2.

10.4 Conditions to avoid

See Section 7.2.

10.5 Incompatible materials

See Section 7.2.

10.6 Hazardous decomposition products

See Section 5.3



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11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

	I an
	There is strong evidence to suggest that this material can cause, if inhaled once, very serious, irreversible damage of organs.
	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.
	Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo. Inhalation of non-toxic gases may cause: - CNS effects: headache, confusion, dizziness, stupor, seizures and coma; respiratory: shortness
	of breath and rapid breathing; - cardiovascular: collapse and irregular heart beats;
	 gastrointestinal: mucous membrane irritation, nausea and vomiting. Inhalation hazard is increased at higher temperatures.
Inhaled:	Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and incoordination.
	Material is highly volatile and may quickly form a concentrated atmosphere in confined or unventilated areas. The vapour may displace and replace air in breathing zone, acting as a simple asphyxiant. This may happen with little warning of overexposure.
	The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing. Before starting consider control of exposure by mechanical ventilation.
	Acute intoxication by halogenated aliphatic hydrocarbons appears to take place over two stages. Signs of a reversible narcosis are evident in the first stage and in the second stage signs of injury to organs may become evident, a single organ alone is (almost) never involved.
	Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual.
	Inhalation exposure may cause susceptible individuals to show change in heart beat rhythm i.e. cardiac arrhythmia. Exposures must be terminated.
	There is strong evidence to suggest that this material can cause, if swallowed once, very serious, irreversible damage of organs. Not normally a hazard due to physical form of product. Considered an unlikely route of entry in commercial/industrial environments.
Ingestion:	Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual. Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal.
	There is strong evidence to suggest that this material, on a single contact with skin, can cause very serious, irreversible damage of organs. The material may accentuate any pre-existing dermatitis condition.
	Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions. Open cuts, abraded or irritated skin should not be exposed to this material.
Skin contact:	Entry into the bloodstream, through for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
	Skin contact with the material may damage the health of the individual; systemic effects may result following absorption. The material may cause severe inflammation of the skin either following direct contact or after a
	delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.
Eye:	Not considered to be a risk because of the extreme volatility of the gas. There is some evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Moderate inflammation may be expected with redness; conjunctivitis may occur with prolonged exposure.
Chronic:	There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment. Main route of exposure to the gas in the workplace is by inhalation.

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Euroroof Spray SA Primer:

Toxicity	Irritation
Not available	Not available

Methylene Chloride:

Toxicity	Irritation
dermal (rat) LD50: >2000 mg/kg[2]	Eye(rabbit): 162 mg - moderate
Inhalation(Rat) LC50; 76 mg/L4h[2]	Eye(rabbit): 500 mg/24hr - mild
Oral(Rat) LD50; >2000 mg/kg[2]	Skin (rabbit): 100mg/24hr-moderate
	Skin (rabbit): 810 mg/24hr-SEVERE

LPG (Liquefied Petroleum Gas):

Toxicity	Irritation
Inhalation(Rat) LC50; 658 mg/l4h[2]	Not available

Dimethyl Ether:

zimemy, zmen			
Toxicity	Irritation		
Inhalation(Rat) LC50; >20000 ppm4h [1]	Not available		

Legend:

1. Value obtained from Europe ECHA Registered Substances - Acute toxicity; 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances.

Methylene Chloride:	The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may cause severe skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. Repeated exposures may produce severe ulceration. WARNING: This substance has been classified by the IARC as Group 2A: Probably		
	Carcinogenic to Humans. Inhalation (human) TCLo: 500 ppm/ 1 y - I Eye(rabbit): 10 mg - mild		
LPG (Liquefied Petroleum Gas):	No significant acute toxicological data identified in literature search, inhalation of the gas		
Euroroof Spray SA Primer & Methylene Chloride:			

Acute Toxicity	×	Carcinogenicity	~
Skin Irritation/Corrosion	~	Reproductivity	×
Serious Eye Damage/Irritation	•	STOT - Single Exposure	*
Respiratory or Skin Sensitisation	×	STOT - Repeated Exposure	X
Mutagenicity	×	Aspiration Hazard	X

Leaend:

- × Data either not available or does not fill the criteria for classification.
- Data available to make classification.

11.2.1. Endocrine Disruption Properties

Not available.

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12. ECOLOGICAL INFORMATION

12.1 Toxicity

Euroroof Spray SA Primer:

End point	Test duration (Hr)	Species	Value	Source
Not available	Not available	Not available	Not available	Not available

Methylene Chloride:

End point	Test duration (Hr)	Species	Value	Source
NOEC (ECx)	24h	Algae or other aquatic plants	0.98mg/l	4
BCF	1008h	Fish	2-5.4	7
EC50	72h	Algae or other aquatic plants	202-286mg/l	4
LC50	96h	Fish	2-3.3mg/l	4
EC50	48h	Crustacea	150-218mg/l	4
EC50	96h	Algae or other aquatic plants	0.98mg/l	4

LPG (Liquefied Petroleum Gas):

(q	to (indicate a constant of any).				
End point	Test duration (Hr)	Species	Value	Source	
EC50(ECx)	96h	Algae or other aquatic plants	7.71mg/l	2	
LC50	96h	Fish	24.11mg/l	2	
EC50	96h	Algae or other aquatic plants	7.71mg/l	2	

Dimethyl Ether:

Pintenty: Enten				
End point	Test duration (Hr)	Species	Value	Source
EC50	48h	Crustacea	>4400mg/L	2
LC50	96h	Fish	1783.04mg/l	2
NOEC(ECx)	48h	Crustacea	>4000mg/l	1
EC50	96h	Algae or other aquatic plants	154.917mg/l	2

Legend:

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data,

For Methylene Chloride:

Log Kow: 1.25; Log Koc: 1.68; Log Kom: 1.44; Henry's atm m3 /mol: 2.68E-03; Henrys Law Constant: 0.002 atm/m3/mol; BCF: 5. Atmospheric Fate: Methylene chloride is a volatile liquid that tends to evaporate to the atmosphere from water and soil. The main degradation pathway for methylene chloride in air is via reactions with hydroxyl radicals the average atmospheric lifetime is estimated to be 130 days.

For Propane:

Koc 460. Log

Kow 2.36.

Henry's Law constant of 7.07x10-1 atm-cu m/mole, derived from its vapour pressure, 7150 mm Hg, and water solubility, 62.4 mg/L.

DO NOT discharge into sewer or waterways.

12.2 Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
Methylene Chloride	LOW (Half-life = 56 days)	HIGH (Half-life = 191 days)
Dimethyl Ether	LOW	LOW

12.3 Bioaccumulation potential

Ingredient	Bioaccumulation	
Methylene Chloride	LOW (BCF = 40)	
Dimethyl Ether	LOW (LogKOW = 0.1)	

12.4 Mobility in soil

Ingredient	Mobility
Methylene Chloride	LOW (KOC = 23.74)
Dimethyl Ether	HIGH (KOC = 1.292)

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12.5 Results of PBT and vPvB assessment

	P	В	T
Relevant available data	Not available	Not available	Not available
PBT	X	×	×
vPvB	×	×	×

PBT Criteria fulfilled?	No
vPvB	No

12.6 Endocrine Disruption Properties

Not available.

12.7. Other adverse effects

Not available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product / packaging disposal:	DO NOT allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal. In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. Evaporate or incinerate residue at an approved site. Return empty containers to supplier. Ensure damaged or non-returnable cylinders are gas-free before disposal.
Waste treatment options:	Not available.
Sewage disposal options:	Not available.

14. TRANSPORT INFORMATION

Labels required:



Marine Pollutant: No.

Hazchem: 3YE.

Land transport (ADR):

taria iranspori (ABR):				
14.1 UN number	3501			
140404	CHEMICAL UNDER PRESSURE, FLAMMABLE, 1	N.O.S. (contains LPG (liquefied		
14.2 UN proper shipping name	petroleum gas), dimethyl ether and methylene	chloride)		
142 Transport bazard algorias	Class:	2.1		
14.3 Transport hazard class(es)	Subrisk:	N/A		
14.4 Packing group	Not applicable			
14.5 Environmental hazard	Not applicable			
	Hazard identification (Kemler):	23		
	Classification code:	F8		
14.6 Special precautions for user	Hazard label:	2.1		
	Special provisions:	274 659		
	Limited quantity:	0		
	Tunnel restriction code: 2 (B/D)			

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Air transport (ICAO-IATA/DGR):

14.1 UN number	3501			
14.2 UN proper shipping name	Chemical under pressure, flammable, n.o.s. * (c	contains LPG (liquefied		
	petroleum gas), dimethyl ether and methylene chloride)			
14.3 Transport hazard class(es)	ICAO/IATA class:	2.1		
	ICAO/IATA subrisk:	N/A		
	ERG code:	10L		
14.4 Packing group	Not applicable			
14.5 Environmental hazard	Not applicable			
14.6 Special precautions for user	Special provisions:	A1 a187		
	Cargo only packing instruction:	218		
	Cargo only maximum qty/pack:	675 kg		
	Passenger and cargo packing instruction:	353		
	Passenger and cargo maximum qty/pack:	Forbidden		
	Passenger and cargo limited aty packing instructions:	Forbidden		
	Passenger and cargo limited maximum aty/pack:	Forbidden		

Sea transport (IMDG-Code/GGVSee):

sea manapon (mado-coac, octace)	·		
14.1 UN number	3501		
14.2 UN proper shipping name	Chemical under pressure, flammable	e, n.o.s. * (contains LPG (liquefied	
	petroleum gas), dimethyl ether and me	thylene chloride)	
14.3 Transport hazard class(es)	IMDG class: 2.1		
	IMDG subrisk:	Not applicable	
14.4 Packing group	Not applicable		
14.5 Environmental hazard	Not applicable		
14.6 Special precautions for user	EMS number:	F-D , S-U	
	Special provisions:	274 362	
	Limited quantities:	0	

Inland waterways transport (ADN):

14.1 UN number	3501		
14.2 UN proper shipping name	Chemical under pressure, flammable, n.o.s.	* (contains LPG (liquefied	
	petroleum gas), dimethyl ether and methylene cl	nloride)	
14.3 Transport hazard class(es)	Class:	2.1	
	Subrisk:	N/A	
14.4 Packing group			
14.5 Environmental hazard	Environmentally hazardous		
14.6 Special precautions for user	Classification code:	8F	
	Special provisions: 274; 659		
	Limited quantity:	0	
	Equipment required:	PP, EX, A	
	Fire cones numbers:	1	

14.7. Transport in bulk according to Annex II of MARPOL and the IBC code

Not applicable.

14.8. Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product Name	Group
Methylene Chloride	Not available
LPG (Liquefied Petroleum Gas)	Not available
Dimethyl Ether	Not available

14.9. Transport in bulk in accordance with the ICG Code

Product Name	Ship Type
Methylene Chloride	Not available
LPG (Liquefied Petroleum Gas)	Not available
Dimethyl Ether	Not available

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15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Methylene Chloride is found on the following regulatory lists:

Chemical Footprint Project - Chemicals of High Concern List

EU Consolidated List of Indicative Occupational Exposure Limit Values (IOELVs)

EU European Chemicals Agency (ECHA) Community Rolling Action Plan (CoRAP) List

of Substances

EU REACH Regulation (EC) No 1907/2006 - Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Europe EC Inventory

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS)

European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC

Monographs - Group 2A: Probably carcinogenic to humans

LPG (liquefied petroleum gas) is found on the following regulatory lists:

Chemical Footprint Project - Chemicals of High Concern List EU REACH Regulation (EC) No 1907/2006 - Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles EU REACH Regulation (EC) No 1907/2006 - Annex XVII (Appendix 1) Carcinogens: category 1A (Table 3.1)/category 1 (Table 3.2)

EU REACH Regulation (EC) No 1907/2006 - Annex XVII (Appendix 4) Mutagens: category 1B (Table 3.1)/category 2 (Table 3.2)

Europe EC Inventory

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS)

European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and

Packaging of Substances and Mixtures - Annex VI

Dimethyl Ether is found on the following regulatory lists:

EU Consolidated List of Indicative Occupational Exposure Limit Values (IOELVs)

EU REACH Regulation (EC) No 1907/2006 - Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Europe EC Inventory

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS)

European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable -: Directives 98/24/EC, - 92/85/EEC, - 94/33/EC, - 2008/98/EC, - 2010/75/EU; Commission Regulation (EU) 2020/878; Regulation (EC) No 1272/2008 as updated through ATPs.

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

ECHA Summary:

Ingredient	CAS number	Index No	ECHA Dossier
Methylene Chloride	75-09-2	602-004-00-3	01-2119480404-41-XXXX 01-2120763590-53-XXXX

Inventory)	Hazard Class and Category Code(s)	Signal Word Code(s)	Hazard Statement Code(s)
1	Carc. 2	GHS08; Wng	H351
2	Narc. STOT SE 3; Resp. STOT SE 3; Carc. 2; Ozone 1; Expl. 1.1; Flam. Gas 1; Flam. Liq. 1; Flam. Sol. 1; Org. Perox. A; Pyr. Sol. 1; Pyr. Liq. 1; Self-heat. 1; Water-react. 1; Ox. Gas 1; Ox. Liq. 1; Ox. Sol. 1; Comp.; Met. Corr. 1; Acute Tox. 1; Asp. Tox. 1; Acute Tox. 1; Skin Corr. 1A; Skin Sens. 1; Eye Dam. 1; Acute Tox. 1; Resp. Sens. 1; Muta. 1A; Repr. 1A; Lact.; STOT SE 1; Aquatic Chronic 1; STOT RE 1; Aquatic Acute 2; Aquatic Chronic 2	GHS08; Wng; GHS07; Dgr; GHS01; GHS09	H351; H319; H336; H302; H341; H335; H314; H370; H202; H372; H401; H411; H360

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Ingredient	CAS number	Index No	ECHA Dossier
LPG (Liquefied Petroleum Gas)	68476-85-7	649-202-00-6	01-2119485911-31-XXXX

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
2	Flam. Gas 1; Muta. 1B; Liq.; Carc. 1A; Repr. 1A; Acute Tox. 4; STOT RE 2; Comp.; Flam. Liq. 1; STOT SE 1	GHS02; GHS08; GHS04; Dgr; GHS07	H220; H340; H280; H350; H360; H332; H373; H224; H370
Harmonisation Code 1	= The most prevalent classification. Harmonisation Code 2 = Th	ne most severe	classification.

Ingredient	CAS number	Index No	ECHA Dossier
Dimethyl Ether	115-10-6	603-019-00-8	01-2119472128-37-XXXX

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Flam. Gas 1	GHS02; GHS04; Dgr	H220
2	Flam. Gas 1; Comp.; Liq.; Muta. 1B; Carc. 1A; Narc. STOT SE 3; STOT SE 1; Skin Irrit. 2; Eye Irrit. 2	GHS02; GHS04; Dgr; GHS01; GHS07; GHS08	H220; H280; H336; H370; H315; H319

National Inventory	Status
Australia - AIIC / Australia Non- Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (methylene chloride; LPG (liquefied petroleum gas); dimethyl ether)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	Yes
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	Yes
Vietnam - NCI	Yes
Russia - FBEPH	Yes
Legend:	Yes = All CAS declared ingredients are on the inventory. No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing (see specific ingredients in brackets).

16. OTHER INFORMATION

Full text risk and hazard codes:

H202 Explosive, severe projection hazard.

H220 Extremely flammable gas.

H224 Extremely flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H340 May cause genetic defects.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H360 May damage fertility or the unborn child.

H370 Causes damage to organs.

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H372 Causes damage to organs through prolonged or repeated exposure.

H373 May cause damage to organs through prolonged or repeated exposure.

H401 Toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

SDS version summary:

- 2	42		
	Version	Date of Update	Section Updated
	2.0	02/10/2023	Template Change

Other information:

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios.

For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:

EN 166 Personal eye-protection

EN 340 Protective clothing

EN 374 Protective gloves against chemicals and micro-organisms

EN 13832 Footwear protecting against chemicals

EN 133 Respiratory protective devices

Definitions and abbreviations:

PC—TWA: Permissible Concentration-Time Weighted Average PC—STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit。

IDLH: Immediately Dangerous to Life or Health Concentrations

ES: Exposure Standard
OSF: Odour Safety Factor

NOAEL: No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index

AIIC: Australian Inventory of Industrial Chemicals

DSL: Domestic Substances List NDSL: Non-Domestic Substances List

IECSC: Inventory of Existing Chemical Substance in China

EINECS: European INventory of Existing Commercial chemical Substances

ELINCS: European List of Notified Chemical Substances

NLP: No-Longer Polymers

ENCS: Existing and New Chemical Substances Inventory

KECI: Korea Existing Chemicals Inventory NZIoC: New Zealand Inventory of Chemicals

PICCS: Philippine Inventory of Chemicals and Chemical Substances

TSCA: Toxic Substances Control Act

TCSI: Taiwan Chemical Substance Inventory. INSQ: Inventario Nacional de Sustancias Químicas

NCI: National Chemical Inventory

FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

The contents and format of this SDS are in accordance with EEC Commission Directive 1999/45/EC, 67/548/EC, 1272/2008/EC and EEC Commission Regulation 1907/2006/EC (REACH) Annex II.

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