

Material Safety Data Sheet



SAFETY DATA SHEET DASA DS-150

According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.

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

1.1. Product identifier

Product name DASA DS-150

Container size 500ml

UFI UFI: GMSJ-S31A-200J-H8X0

EU REACH registration notes All chemicals used in this product have been registered under REACH where required.

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

Identified uses Cleaning agent. Use only as directed.

1.3. Details of the supplier of the safety data sheet

Supplier DASA International B.V.
Bergerweg 62
1815 AE Alkmaar
Netherlands

info@dasa-international.com
+31(0)72 5719917

1.4. Emergency telephone number

Emergency telephone DASA: +31(0)72-5719917 (Mon-Fri 09:00-17:00)

National emergency telephone number National Poisons Information Service (UK): 0844 892 0111 (healthcare professionals only)
NHS: 111 (members of the public)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards Aerosol 1 - H222, H229

Health hazards Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Asp. Tox. 1 - H304

Environmental hazards Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

2.2. Label elements

Hazard pictograms



Signal word

Danger

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Hazard statements	H222 Extremely flammable aerosol. H229 Pressurised container: may burst if heated. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H410 Very toxic to aquatic life with long lasting effects.
Precautionary statements	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 spray. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Supplemental label information	Please refer to Safety Data Sheet. Use only as directed.
Contains	D-limonene
Supplementary precautionary statements	P264 Wash contaminated skin thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P302+P352 IF ON SKIN: Wash with plenty of water. P362+P364 Take off contaminated clothing and wash it before reuse. P391 Collect spillage. P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

D-limonene	60-100%
CAS number: 5989-27-5	EC number: 227-813-5
M factor (Acute) = 1	M factor (Chronic) = 1
Classification	
Flam. Liq. 3 - H226	
Skin Irrit. 2 - H315	
Skin Sens. 1 - H317	
Asp. Tox. 1 - H304	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	
PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS (<0.1% 1,3 BUTADIENE)	30-60%
CAS number: 68476-85-7	EC number: 270-704-2
Classification	
Flam. Gas 1A - H220	
Press. Gas (Liq.) - H280	

The full text for all hazard statements is displayed in Section 16.

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Composition comments Liquefied petroleum gases (CAS: 68476-85-7) contains less than 0.1% w/w 1,3-butadiene, meaning that the full harmonised classification regarding Muta. 1B H340 and Carc. 1A H350 does not apply. This product does not contain nanoforms.

Ingredient notes Where required, the acute toxicity estimate (ATE) for any substance is listed in Section 11.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Move affected person to fresh air at once.

Inhalation Move affected person to fresh air at once. If breathing stops, provide artificial respiration. Keep affected person warm and at rest. Get medical attention immediately.

Ingestion Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention if any discomfort continues.

Skin contact Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.

Eye contact Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Remove any contact lenses and open eyelids wide apart. Get medical attention promptly if symptoms occur after washing.

4.2. Most important symptoms and effects, both acute and delayed

General information Prolonged and repeated contact with solvents over a long period may lead to permanent health problems. Get medical attention promptly if symptoms occur after washing.

Inhalation In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death. Vapours may cause headache, fatigue, dizziness and nausea. There may be a feeling of tightness in the chest with shortness of breath.

Ingestion May cause nausea, headache, dizziness and intoxication. Burning sensation in mouth. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation. Risk of lung aspiration due to low viscosity of product.

Skin contact Skin irritation. Allergic rash.

Eye contact Irritation of eyes and mucous membranes.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor Show this safety data sheet to the doctor in attendance.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use alcohol-resistant foam, carbon dioxide or dry powder to extinguish.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards May explode when heated or when exposed to flames or sparks. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. The product is extremely flammable. In use may form flammable/explosive vapour-air mixture.

Hazardous combustion products Acrid smoke or fumes. Oxides of carbon.

5.3. Advice for firefighters

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Protective actions during firefighting Use water spray to reduce vapours. Containers can burst violently or explode when heated, due to excessive pressure build-up. Cool containers exposed to flames with water until well after the fire is out. Bursting aerosol containers may be propelled from a fire at high speed.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions For personal protection, see Section 8. Ensure suitable respiratory protection is worn during removal of spillages in confined areas. Take precautionary measures against static discharges. No smoking, sparks, flames or other sources of ignition near spillage. Avoid inhalation of vapours and contact with skin and eyes.

For non-emergency personnel Keep upwind to avoid inhalation of gases, vapours, fumes and smoke.

For emergency responders For the greatest protection, clothing should include anti-static overalls, boots and gloves. Approach the spillage from upwind.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Eliminate all sources of ignition. Provide adequate ventilation. Absorb in vermiculite, dry sand or earth and place into containers. Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Keep away from heat, sparks and open flame. Read and follow manufacturer's recommendations. Avoid inhalation of vapours and spray/mists. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited. Do not spray on an open flame or other ignition source.

Advice on general occupational hygiene Wash after use and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin. Wash contaminated skin thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from heat, sparks and open flame. Store at temperatures not exceeding 50°C. Do not pierce or burn, even after use.

Storage class Extremely Flammable Aerosol

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

Usage description Cleaning agent.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

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D-limonene

Short-term exposure limit (15-minute): WEL 150 ppm 10 minutes

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS (<0.1% 1,3 BUTADIENE)

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1750 mg/m³

Short-term exposure limit (15-minute): WEL 1250 ppm 2180 mg/m³

WEL = Workplace Exposure Limit.

D-limonene (CAS: 5989-27-5)

DNEL

Consumer - Oral; Long term systemic effects: 4.44 mg/kg/day
 Consumer - Dermal; Long term systemic effects: 4.44 mg/kg/day
 Workers - Dermal; Long term systemic effects: 8.89 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 7.78 mg/m³
 Workers - Inhalation; Long term systemic effects: 31.1 mg/m³

PNEC

- Fresh water; 0.054 mg/l
 - Sediment (Freshwater); 1.3 mg/kg
 - Intermittent release; 0.00577 mg/l
 - Sediment (Marinewater); 0.13 mg/kg
 - marine water; 0.0054 mg/l
 - STP; 2.1 mg/l
 - Soil; 0.261 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation.

Personal protection

Wear protective work clothing.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Tight-fitting safety glasses.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Frequent changes are recommended. The breakthrough time for any glove material may be different for different glove manufacturers. When used with mixtures, the protection time of gloves cannot be accurately estimated. It is recommended that gloves are made of the following material: Nitrile rubber.

Other skin and body protection

Provide eyewash station. Wear suitable gloves if prolonged or repeated skin contact is likely

Hygiene measures

Promptly remove any clothing that becomes wet or contaminated. Wash promptly if skin becomes contaminated. Do not eat, drink or smoke when using this product.

Respiratory protection

Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. If ventilation is inadequate, suitable respiratory protection must be worn. Gas filter, type AX.

Thermal hazards

Spray will evaporate and cool rapidly and may cause frostbite or cold burns if in contact with skin.

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Environmental exposure controls Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	Colourless to pale yellow.
Odour	Citrus.
Odour threshold	Not available.
pH	Not available.
Melting point	No information required.
Initial boiling point and range	Liquefied petroleum gases: -40 to -2°C
Flash point	No information required. A flash point method is not available but the major hazardous component, the liquefied petroleum gases, has a flash point of <-60°C with flammability limits of 10.9% vol. upper and 1.4% vol. lower.
Evaporation rate	Not available.
Evaporation factor	Not available.
Flammability (solid, gas)	No information required.
Upper/lower flammability or explosive limits	No information required.
Vapour pressure	3 - 5 bar @ 20°C
Vapour density	Not available.
Relative density	Liquid base: 0.85 - 0.95 @ 25°C
Solubility(ies)	Immiscible with water.
Partition coefficient	Not available.
Auto-ignition temperature	Liquefied petroleum gases: 365°C
Viscosity	Liquid base: Kinematic viscosity ≤ 20.5 mm ² /s.
Explosive properties	In use may form flammable/explosive vapour-air mixture.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Particle size	No information required.
Volatile organic compound	This product contains a maximum VOC content of 100 %.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Stable under recommended transport or storage conditions.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

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Possibility of hazardous reactions No known hazardous reactions if stored under normal conditions. Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to avoid Strong acids. Strong alkalis. Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Summary Based on available data the classification criteria are not met.

Acute toxicity - dermal

Summary Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Summary Based on available data the classification criteria are not met.

Skin corrosion/irritation

Summary Causes skin irritation.

Serious eye damage/irritation

Summary Based on available data the classification criteria are not met.

Respiratory sensitisation

Summary Based on available data the classification criteria are not met.

Skin sensitisation

Summary May cause an allergic skin reaction.

Germ cell mutagenicity

Summary Based on available data the classification criteria are not met.

Carcinogenicity

Summary Based on available data the classification criteria are not met.

Reproductive toxicity

Summary Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

Summary Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

Summary Based on available data the classification criteria are not met.

Aspiration hazard

Summary May be fatal if swallowed and enters airways.

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11.2. Information on other hazards

11.2.1. Endocrine disrupting properties There are no adverse health effects caused by endocrine disrupting properties.

11.2.2. Other information No information available.

Toxicological information on ingredients.

D-limonene

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 4,400.0

Species Rat

Notes (oral LD₅₀) LD₅₀ >5000 mg/kg, Oral, Rat

ATE oral (mg/kg) 4,400.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >5000 mg/kg, Dermal, Rabbit

Skin corrosion/irritation

Skin corrosion/irritation Irritating to skin.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Genotoxicity - in vivo Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS (<0.1% 1,3 BUTADIENE)

Toxicological effects Information given is based on data of the components and of similar products.

Acute toxicity - oral

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Notes (oral LD₅₀)	Not applicable.
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	Not applicable.
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	LC ₅₀ >20 mg/l, Inhalation, Rat
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	Not irritating.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Not irritating.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Not sensitising.
<u>Skin sensitisation</u>	
Skin sensitisation	Not sensitising.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	This substance has no evidence of mutagenic properties.
<u>Carcinogenicity</u>	
Carcinogenicity	Carcinogenicity in humans is not expected.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Does not contain any substances known to be toxic to reproduction.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	A single exposure may cause the following adverse effects: Overexposure to organic solvents may depress the central nervous system, causing dizziness and intoxication and, at very high concentrations, unconsciousness and death.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
<u>Aspiration hazard</u>	
Aspiration hazard	Based on available data the classification criteria are not met.
<u>Inhalation</u>	
Inhalation	May cause respiratory system irritation.
<u>Skin contact</u>	
Skin contact	Spray will evaporate and cool rapidly and may cause frostbite or cold burns if in contact with skin.
<u>Route of exposure</u>	
Route of exposure	Inhalation Skin and/or eye contact

SECTION 12: Ecological information

Ecotoxicity	Avoid the spillage or runoff entering drains, sewers or watercourses. Very toxic to aquatic life with long lasting effects.
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Ecological information on ingredients.

D-limonene

Ecotoxicity Very toxic to aquatic life with long lasting effects.

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS (<0.1% 1,3 BUTADIENE)

Ecotoxicity Information given is based on data of the components and of similar products.

12.1. Toxicity

Toxicity Contains a substance which is very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment..

Ecological information on ingredients.

D-limonene

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity - fish LC₅₀, 96 hours: 0.71 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, : 0.4 mg/l, Daphnia magna

Acute toxicity - aquatic plants IC₅₀, : 4 mg/l, Algae

Chronic aquatic toxicity

M factor (Chronic) 1

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS (<0.1% 1,3 BUTADIENE)

Toxicity Not regarded as dangerous for the environment. The product is not believed to present a hazard due to its physical nature. Highly volatile.

12.2. Persistence and degradability

Persistence and degradability No data available.

Ecological information on ingredients.

D-limonene

Persistence and degradability The product is biodegradable.

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS (<0.1% 1,3 BUTADIENE)

Persistence and degradability The product is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

Ecological information on ingredients.

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D-limonene

Bioaccumulative potential BCF: 32-156(l),

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS (<0.1% 1,3 BUTADIENE)

Bioaccumulative potential Bioaccumulation is unlikely.

12.4. Mobility in soil

Mobility The product contains organic solvents which will evaporate easily from all surfaces. The product is miscible with water and may spread in water systems.

Ecological information on ingredients.

D-limonene

Mobility No data available.

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS (<0.1% 1,3 BUTADIENE)

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

D-limonene

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current UK criteria.

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS (<0.1% 1,3 BUTADIENE)

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

12.6. Endocrine disrupting properties There are no adverse effects on the environment caused by endocrine disrupting properties.

12.7. Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Do not puncture or incinerate, even when empty. Ensure containers are empty before discarding (explosion risk). Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods Containers should be thoroughly emptied before disposal because of the risk of an explosion. Do not puncture or incinerate, even when empty. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Waste class Empty Aerosol: 15 01 10 (Containing hazardous residues), Empty Aerosol: 15 01 04 (No hazardous residues). Full or Partially Empty Aerosol: 16 05 04,

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SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950
UN No. (ADN)	1950

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	AEROSOLS
Proper shipping name (IMDG)	AEROSOLS, MARINE POLLUTANT (D-LIMONENE)
Proper shipping name (ICAO)	AEROSOLS
Proper shipping name (ADN)	AEROSOLS

14.3. Transport hazard class(es)

ADR/RID class	2.1
ADR/RID classification code	5F
ADR/RID label	2.1
IMDG class	2.1
ICAO class/division	2.1
ADN class	2.1

Transport labels



14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

IMDG Code segregation group	SG69, SW1, SW22
EmS	F-D, S-U
ADR transport category	2
Tunnel restriction code	(D)

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

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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

National regulations Control of Substances Hazardous to Health Regulations 2002 (as amended).
The Aerosol Dispensers Regulations 2009 (SI 2009 No. 2824).

Authorisations (SI 2020 No. 1577 Annex XIV) No specific authorisations are known for this product.

Restrictions (SI 2020 No. 1577 Annex XVII) No specific restrictions on use are known for this product.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Classification procedures according to SI 2019 No. 720 Aerosol 1 - H222, H229: Weight of evidence.
Asp. Tox. 1 - H304: On basis of test data., Kinematic viscosity $\leq 20.5 \text{ mm}^2/\text{s}$.
Skin Irrit. 2 - H315, Skin Sens. 1 - H317, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410:
Calculation method.

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Revision 5.1

Supersedes date 20/05/2022

SDS number 21994

Hazard statements in full H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H226 Flammable liquid and vapour.
H229 Pressurised container: may burst if heated.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.