

Material Safety Data Sheet



SAFETY DATA SHEET DASA DS-709

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-709

Container size 15.2kg

UFI UFI: WFEX-H8YP-300W-NVPU

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 Adhesive. Use only as directed.

Uses advised against Flexible PVC due to the risk of plasticiser migration.

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 Flam. Gas 1A - H220 Press. Gas (Liq.) - H280

Health hazards Eye Irrit. 2 - H319 STOT SE 3 - H336

Environmental hazards Aquatic Chronic 2 - H411

2.2. Label elements

Hazard pictograms



Signal word

Danger

DASA DS-709

Hazard statements	H220 Extremely flammable gas. H280 Contains gas under pressure; may explode if heated. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H411 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. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312 Call a POISON CENTRE/doctor if you feel unwell. P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely. P410+P403 Protect from sunlight. Store in a well-ventilated place.
Supplemental label information	EUH066 Repeated exposure may cause skin dryness or cracking. Please refer to Safety Data Sheet. Use only as directed.
Contains	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, ACETONE, METHYL ACETATE, TOLUENE
Supplementary precautionary statements	P261 Avoid breathing spray. P264 Wash contaminated skin thoroughly after handling. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/ attention. P381 In case of leakage, eliminate all ignition sources. P391 Collect spillage. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

Containers should be thoroughly emptied before disposal because of the risk of an explosion. Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. In use may form flammable/explosive vapour-air mixture. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

DIMETHYL ETHER	30-60%
CAS number: 115-10-6	EC number: 204-065-8
Classification	
Flam. Gas 1A - H220	
Press. Gas (Liq.) - H280	

DASA DS-709

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	10-30%
CAS number: —	EC number: 926-605-8
Classification	
Flam. Liq. 2 - H225	
STOT SE 3 - H336	
Asp. Tox. 1 - H304	
Aquatic Chronic 2 - H411	
ACETONE	10-30%
CAS number: 67-64-1	EC number: 200-662-2
Classification	
Flam. Liq. 2 - H225	
Eye Irrit. 2 - H319	
STOT SE 3 - H336	
METHYL ACETATE	1-5%
CAS number: 79-20-9	EC number: 201-185-2
Classification	
Flam. Liq. 2 - H225	
Eye Irrit. 2 - H319	
STOT SE 3 - H336	
TOLUENE	1-5%
CAS number: 108-88-3	EC number: 203-625-9
Classification	
Flam. Liq. 2 - H225	
Acute Tox. 4 - H332	
Skin Irrit. 2 - H315	
Repr. 2 - H361d	
STOT SE 3 - H336	
STOT RE 2 - H373	
Asp. Tox. 1 - H304	

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

Composition comments 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. Show this Safety Data Sheet to the medical personnel.

DASA DS-709

Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Keep affected person under observation. If breathing stops, provide artificial respiration. Get medical attention immediately.
Ingestion	Rinse mouth thoroughly with water. Get medical attention. Do not induce vomiting.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. If adhesive bonding occurs, do not force eyelids apart.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.

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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.
Inhalation	Coughing, chest tightness, feeling of chest pressure. Exposure may cause coughing or wheezing. In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death.
Ingestion	There may be soreness and redness of the mouth and throat.
Skin contact	Prolonged contact may cause redness, irritation and dry skin. Product has a defatting effect on skin.
Eye contact	There may be irritation and redness. Eyes may water profusely. Irritating to eyes.

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

Notes for the doctor	Show this Safety Data Sheet to the medical personnel. Prolonged or repeated exposure may cause the following adverse effects: Vapours may cause headache, fatigue, dizziness and nausea. Difficulty in breathing.
Specific treatments	If adhesive bonding occurs, do not force eyelids apart.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Water spray, dry powder or carbon dioxide. Alcohol-resistant foam.
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	Containers can burst violently or explode when heated, due to excessive pressure build-up. Forms explosive mixtures with air. 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.
Hazardous combustion products	Oxides of carbon. Acrid smoke or fumes.

5.3. Advice for firefighters

Protective actions during firefighting	Use water to keep fire exposed containers cool and disperse vapours. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses.
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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 Wear protective clothing as described in Section 8 of this safety data sheet. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Do not breathe vapour. Avoid contact with eyes and prolonged skin contact.

For non-emergency personnel For the greatest protection, clothing should include anti-static overalls, boots and gloves.

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

6.2. Environmental precautions

Environmental precautions Contain the spillage using bunding. Contain spillage with sand, earth or other suitable non-combustible material.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Absorb in vermiculite, dry sand or earth and place into containers. Avoid the spillage or runoff entering drains, sewers or watercourses. Collect spillage for reclamation or disposal in sealed containers via a licensed waste contractor. Avoid water contacting spilled material or leaking containers. Approach the spillage from upwind. Take precautionary measures against static discharge. Use only non-sparking tools.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 7 for information on safe handling. 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. Static electricity and formation of sparks must be prevented. Wear protective clothing as described in Section 8 of this safety data sheet. Read and follow manufacturer's recommendations. Do not use in confined spaces without adequate ventilation and/or respirator. Do not eat, drink or smoke when using this product.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product. Remove contaminated clothing and protective equipment before entering eating areas. Wash after use and before eating, smoking and using the toilet. Do not smoke in work area. Clean equipment and the work area every day.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Under normal conditions of handling and storage, spillages from aerosol containers are unlikely. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Store in tightly-closed, original container in a dry, cool and well-ventilated place. Avoid contact with oxidising agents.

Storage class Flammable compressed gas storage.

7.3. Specific end use(s)

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

Usage description Adhesive.

SECTION 8: Exposure controls/Personal protection

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8.1. Control parameters

Occupational exposure limits

DIMETHYL ETHER

Long-term exposure limit (8-hour TWA): WEL 400 ppm 766 mg/m³

Short-term exposure limit (15-minute): WEL 500 ppm 958 mg/m³

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Heptane:

Long-term exposure limit (8-hour TWA): WEL 500 ppm

n-Hexane:

Long-term exposure limit (8-hour TWA): WEL 72 mg/m³ 20 ppm

ACETONE

Long-term exposure limit (8-hour TWA): WEL 500 ppm 1210 mg/m³

Short-term exposure limit (15-minute): WEL 1500 ppm 3620 mg/m³

METHYL ACETATE

Long-term exposure limit (8-hour TWA): WEL 200 ppm 616 mg/m³

Short-term exposure limit (15-minute): WEL 250 ppm 770 mg/m³

TOLUENE

Long-term exposure limit (8-hour TWA): WEL 50 ppm(Sk) 191 mg/m³(Sk)

Short-term exposure limit (15-minute): WEL 100 ppm(Sk) 384 mg/m³(Sk)

WEL = Workplace Exposure Limit.

DIMETHYL ETHER (CAS: 115-10-6)

PNEC

Fresh water; 0.155 mg/l
 marine water; 0.016 mg/l
 Intermittent release; 1.549 mg/l
 STP; 160 mg/l
 Sediment (Freshwater); 0.681 mg/l
 Sediment (Marinewater); 0.069 mg/l
 Soil; 0.045 mg/l

ACETONE (CAS: 67-64-1)

DNEL

Workers - Dermal; Long term : 186 mg/kg/day
 Workers - Inhalation; Short term : 2420 mg/m³
 Workers - Inhalation; Long term : 1210 mg/m³
 Consumer - Oral; Long term : 62 mg/kg/day
 Consumer - Dermal; Long term : 62 mg/kg/day
 Consumer - Inhalation; Long term : 200 mg/m³

PNEC

Fresh water; 10.6 mg/l
 marine water; 1.06 mg/l
 Intermittent release; 21 mg/l
 Sediment (Freshwater); 30.4 mg/kg/day
 Sediment (Marinewater); 3.04 mg/kg/day
 Soil; 33.3 mg/kg/day
 STP; 100 mg/l

TOLUENE (CAS: 108-88-3)

DASA DS-709

DNEL	<p>Consumer - Oral; Long term systemic effects: 8.13 mg/kg/day</p> <p>Workers - Dermal; Long term systemic effects: 384 mg/kg/day</p> <p>Consumer - Inhalation; Short term local effects: 226 mg/m³</p> <p>Consumer - Inhalation; Short term systemic effects: 226 mg/m³</p> <p>Workers - Inhalation; Short term systemic effects: 384 mg/m³</p> <p>Workers - Inhalation; Short term local effects: 384 mg/m³</p> <p>Workers - Inhalation; Long term local effects: 192 mg/m³</p> <p>Consumer - Inhalation; Long term systemic effects: 56.5 mg/m³</p> <p>Workers - Inhalation; Long term systemic effects: 192 mg/m³</p>
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PNEC	<ul style="list-style-type: none"> - Fresh water; 0.68 mg/l - Sediment (Freshwater); 16.39 mg/kg - STP; 13.61 mg/l - Soil; 2.89 mg/kg - Sediment (Marinewater); 16.39 mg/kg - marine water; 0.68 mg/l
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8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Ensure that the direction of airflow is clearly away from the worker. Use approved respirator if air contamination is above an acceptable level. Observe any occupational exposure limits for the product or ingredients. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Ensure operatives are trained to minimise exposure.

Personal protection

Wear protective work clothing.

Eye/face protection

Wear chemical splash goggles. Personal protective equipment that provides appropriate eye and face protection should be worn.

Hand protection

(PE/PA/PE), 2.5mil (0.06mm), >480 min. To protect hands from chemicals, wear gloves that are proven to be impervious to the chemical and resist degradation. 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. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. When used with mixtures, the protection time of gloves cannot be accurately estimated.

Other skin and body protection

Provide eyewash station. Avoid contact with skin. Wear suitable coveralls to prevent exposure to the skin.

Hygiene measures

Promptly remove any clothing that becomes contaminated. Wash promptly if skin becomes contaminated. When using do not eat, drink or smoke. Use appropriate hand lotion to prevent defatting and cracking of skin. Wash at the end of each work shift and before eating, smoking and using the toilet.

Respiratory protection

In confined or poorly-ventilated spaces, a supplied-air respirator must be worn. Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Gas filter, type AX.

Thermal hazards

Extremely cold, can cause frost bite.

DASA DS-709

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	Green.
Odour	Hydrocarbons.
Odour threshold	Data lacking.
pH	pH (concentrated solution): 7
Melting point	Data lacking.
Initial boiling point and range	Dimethyl ether: -25°C Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane: 75-90°C Acetone: 56°C
Flash point	A flash point method is not available for aerosols, but the major hazardous component, the propellant (dimethyl ether) has a flash point of <-41°C with flammability limits of 26.2% vol. upper and 3.3% vol. lower.
Evaporation rate	Not available.
Evaporation factor	Not available.
Flammability (solid, gas)	No information required.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No specific test data are available.
Vapour pressure	3 - 5 bar @ 20°C
Vapour density	Not available.
Relative density	Liquid base: 0.84 @ 20°C
Bulk density	Not applicable.
Solubility(ies)	Insoluble in water.
Partition coefficient	Not available.
Auto-ignition temperature	Dimethyl ether: 226°C
Decomposition Temperature	Not available.
Viscosity	Liquid base: 400 - 700 mm ² /s @ 20°C
Explosive properties	In use may form flammable/explosive vapour-air mixture.
Explosive under the influence of a flame	Yes
Oxidising properties	Does not meet the criteria for classification as oxidising.
9.2. Other information	
Particle size	No information required.
Volatile organic compound	589 g/l

DASA DS-709

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. Highly volatile.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Will not polymerise. In use may form flammable/explosive vapour-air mixture.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Containers can burst violently or explode when heated, due to excessive pressure build-up. Avoid the accumulation of vapours in low or confined areas.

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

Hazardous decomposition products Oxides of carbon.

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 Based on available data the classification criteria are not met.

Serious eye damage/irritation

Summary Causes serious eye irritation.

Respiratory sensitisation

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

Skin sensitisation

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

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

DASA DS-709

Summary May cause drowsiness or dizziness.

STOT - single exposure Narcotic effect.

Specific target organ toxicity - repeated exposure

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

Aspiration hazard

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

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.

DIMETHYL ETHER

Acute toxicity - oral

Notes (oral LD₅₀) Not applicable.

Acute toxicity - dermal

Notes (dermal LD₅₀) Not applicable.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) 164000 ppm, Inhalation, Rat

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

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.

Respiratory sensitisation

Respiratory sensitisation 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.

General information

The product irritates mucous membranes and may cause abdominal discomfort if swallowed.

ACETONE

Toxicological effects The toxicity of this substance has been assessed during REACH registration.

Acute toxicity - oral

DASA DS-709

Acute toxicity oral (LD₅₀ mg/kg) 5,800.0

Species Rat

ATE oral (mg/kg) 5,800.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 7,400.0

Species Rabbit

ATE dermal (mg/kg) 7,400.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 76.0

Species Rat

ATE inhalation (vapours mg/l) 76.0

Skin corrosion/irritation

Skin corrosion/irritation Repeated exposure may cause skin dryness or cracking.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Skin sensitisation

Skin sensitisation Not sensitising. Guinea pig

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative.

Genotoxicity - in vivo Micronucleus assay: Negative.

Reproductive toxicity

Reproductive toxicity - development No evidence of reproductive toxicity in animal studies.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 900 mg/kg/90d bw/d, Oral, Rat
NOAEC 22500 mg/m³/8w, Inhalation, Rat

METHYL ACETATE**Acute toxicity - oral**

Notes (oral LD₅₀) LD₅₀ 3705 mg/kg, Oral, Rabbit

Skin corrosion/irritation

Skin corrosion/irritation Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

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TOLUENE

Toxicological effects	The toxicity of this substance has been assessed during REACH registration. This product is very toxic.
<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD₅₀ mg/kg)	4,328.0
Species	Rat
Notes (oral LD₅₀)	LD ₅₀ >5000 mg/kg, Oral, Rat
ATE oral (mg/kg)	4,328.0
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD₅₀ mg/kg)	5,000.0
Species	Rabbit
Notes (dermal LD₅₀)	LD ₅₀ >5000 mg/kg, Dermal, Rabbit
ATE dermal (mg/kg)	5,000.0
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC₅₀ vapours mg/l)	19.0
Species	Rat
Notes (inhalation LC₅₀)	>20 mg/l, Inhalation, Rat
ATE inhalation (vapours mg/l)	19.0
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	Skin irritation.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	Based on available data the classification criteria are not met.
<u>Reproductive toxicity</u>	
Reproductive toxicity - development	Suspected of damaging the unborn child.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	May cause drowsiness or dizziness.

DASA DS-709

Specific target organ toxicity - repeated exposure

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

Ecotoxicity The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

Ecological information on ingredients.

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Ecotoxicity Toxic to aquatic life with long lasting effects.

12.1. Toxicity

Toxicity Toxic to aquatic life with long lasting effects.

Ecological information on ingredients.

DIMETHYL ETHER

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: >4000 mg/l, Poecilia reticulata (Guppy)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: >4000 mg/l, Daphnia magna
LC₅₀, 48 hours: 755,549 mg/l, Daphnia magna

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Acute aquatic toxicity

Acute toxicity - fish LL₅₀, 96 hours: 9.776 mg/l, Freshwater fish

Acute toxicity - aquatic invertebrates EL50, 48 hours: 3.0 mg/l, Daphnia magna

Acute toxicity - microorganisms NOEL, 48 hours: 8.483 mg/l, Tetrahymena pyriformis.

ACETONE

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 5540 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 8800 mg/l, Daphnia magna

Acute toxicity - aquatic plants NOEC, 8 hours: 530 mg/l/8 d, Algae

Acute toxicity - terrestrial LD₅₀, 48 hours: 0.1 - 1 mg/cm², Eisenia Fetida (Earthworm)

TOLUENE

Acute aquatic toxicity

DASA DS-709

Acute toxicity - fish	LC50, 96 hours: 13 mg/l, Carassius auratus (Goldfish) NOEC, 192 hours: >1<10 mg/l, LC ₅₀ , 96 hours: >1<10 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 11.5 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC ₅₀ , 72 hours: 12 mg/l, Selenastrum capricornutum IC ₅₀ , 72 hours: >100 mg/l, Algae

12.2. Persistence and degradability

Persistence and degradability Biodegradable in part only. Biodegradable in part only.

Ecological information on ingredients.**DIMETHYL ETHER**

Biodegradation Water - 5%: 28 days

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Persistence and degradability The product is biodegradable.

ACETONE

Persistence and degradability The product is readily biodegradable.

Biodegradation Water - Degradation >60: 28 days

TOLUENE

Persistence and degradability The product is readily biodegradable.

Biological oxygen demand 1.23 g O₂/g substance

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

Ecological information on ingredients.**DIMETHYL ETHER**

Bioaccumulative potential No data available on bioaccumulation.

ACETONE

Bioaccumulative potential BCF 3

TOLUENE

Bioaccumulative potential The product is not bioaccumulating.

12.4. Mobility in soil

Mobility Readily absorbed into soil.

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Ecological information on ingredients.

DIMETHYL ETHER

Mobility Koc: 7,759

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

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

ACETONE

Mobility Mobile.

TOLUENE

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.

DIMETHYL ETHER

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

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

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

ACETONE

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

TOLUENE

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.

Ecological information on ingredients.

TOLUENE

Other adverse effects Do not discharge into drains or watercourses or onto the ground.

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	Ensure containers are empty before discarding (explosion risk). Must not be disposed of together with household waste.
Disposal methods	Do not puncture or incinerate, even when empty. Avoid the spillage or runoff entering drains, sewers or watercourses. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.
Waste class	Empty Canister: 15 01 10 (Containing hazardous residue), Empty Canister: 15 01 04 (No hazardous residues), Full or Partially Empty Canister: 16 05 04.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	3501
UN No. (IMDG)	3501
UN No. (ICAO)	3501
UN No. (ADN)	3501

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	CHEMICAL UNDER PRESSURE, FLAMMABLE, N.O.S. (DIMETHYL ETHER, Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane)
Proper shipping name (IMDG)	CHEMICAL UNDER PRESSURE, FLAMMABLE, N.O.S. (DIMETHYL ETHER, Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane)
Proper shipping name (ICAO)	CHEMICAL UNDER PRESSURE, FLAMMABLE, N.O.S. (DIMETHYL ETHER, Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane)
Proper shipping name (ADN)	CHEMICAL UNDER PRESSURE, FLAMMABLE, N.O.S. (DIMETHYL ETHER, Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane)

14.3. Transport hazard class(es)

ADR/RID class	2.1
ADR/RID classification code	8F
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

DASA DS-709**Environmentally hazardous substance/marine pollutant****14.6. Special precautions for user**

IMDG Code segregation group	SW2
EmS	F-D, S-U
ADR transport category	2
Emergency Action Code	2YE
Hazard Identification Number (ADR/RID)	23
Tunnel restriction code	(B/D)

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

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	Health and Safety at Work etc. Act 1974 (as amended). Control of Substances Hazardous to Health Regulations 2002 (as amended).
Guidance	Workplace Exposure Limits EH40.
Authorisations (SI 2020 No. 1577 Annex XIV)	No specific authorisations are known for this product.
Restrictions (SI 2020 No. 1577 Annex XVII)	Entry number: 48

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	Flam. Gas 1 - H220, Press. Gas (Liq.) - H280: Weight of evidence. Eye Irrit. 2 - H319, STOT SE 3 - H336, Aquatic Chronic 2 - H411: Calculation method.
Issued by	Technical Department
Revision date	09/05/2023
Revision	2.2
Supersedes date	08/12/2021
SDS number	21979

DASA DS-709

Hazard statements in full

H220 Extremely flammable gas.
H225 Highly flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.
H361d Suspected of damaging the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 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.