Safety Data Sheet
according to EC-Regulation 91/155/EEC

1. Identification of the substance/preparation and of the company/undertaking

Identification of the substance or preparation

Prüfgas 918/5

Use of the substance/preparation
Test gas

Company/undertaking identification
ASM Aerosol-Service AG Möhlin, Industriestraße 11, CH -4313 Möhlin
Telefon CH-61/8556767   Telefax CH-61/8556700

Emergency telephone / Office for advice
Advisory office in case of poisoning:
Tel.: Swiss Toxicological Information Centre (STIC), CH-8030 Zürich Tel.: +41 (0)44 251 51 51
Telephone number of the company in case of emergencies:
Tel. --

2. Composition/information on ingredients

2.1 Chemical name content % symbol R-phrases CAS EINECS, ELINCS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>%</th>
<th>Symbol</th>
<th>R-phrases</th>
<th>CAS</th>
<th>EINECS, ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acetate</td>
<td>1 - 5</td>
<td>F/Xi</td>
<td>11-36-66-67</td>
<td>205-500-4</td>
<td></td>
</tr>
<tr>
<td>Propan-2-ol</td>
<td>1 - 5</td>
<td>F/Xi</td>
<td>11-36-67</td>
<td>200-661-7</td>
<td></td>
</tr>
</tbody>
</table>

For complete wording of the R-phrases, refer to point 16.

3. Hazards identification

3.1 To people
See point 11 and 15.
Preparation is classified as hazardous in the sense of directive 1999/45/EC.
Product is extremely flammable.
When using: development of explosive vapour/air mixture possible.
Danger of bursting (explosion) when heated.

3.2 To the environment
See point 12.

4. First aid measures

4.1 Inhalation
Supply person with fresh air and consult doctor according to symptoms.
Keep Data Sheet available.

4.2 Eye contact
Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

4.3 Skin contact
Wash thoroughly using copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult doctor.

4.4 Ingestion
Call doctor immediately - have Data Sheet available.

4.5 Special resources necessary for first aid
n.g.

5. Fire-fighting measures

5.1 Suitable extinguishing media
Dry extinguisher
5.2 Extinguishing media which must not be used for safety reasons
High volume water jet

5.3 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases
In case of fire the following can develop:
- Gases hazardous to health
- Decomposition products
- Danger of explosion by prolonged heating.

5.4 Special protective equipment for fire-fighters
Protective respirator with independent air supply
According to size of fire
Full protection, if necessary

5.5 Further information
Dispose of contaminated extinction water according to official regulations.

6. Accidental release measures

Refer to point 13. and for personal protection refer to point 8.

6.1 Personal precautions
Remove possible causes of ignition - do not smoke.
Ensure sufficient supply of air.
Avoid inhaling.

6.2 Environmental measures
If leakage occurs, dam up.

6.3 Methods for cleaning up
If spray or gas escapes, ensure ample fresh air is available.
Active substance:
Collect using absorbant material (e.g. Universal binding medium, sand, kieselguhr, sawdust), and dispose of according to point 13.

7. Handling and storage

7.1 Handling
Tips for safe handling:
See point 6.1
Ggf. örtliche Absauganlage einschalten.
Observe directions on label and instructions for use.
Keep away from sources of ignition - Do not smoke.
Ensure good ventilation.

7.2. Storage
Requirements for storage rooms and containers:
- Not to be stored in gangways or stair wells.
- Do not store with flammable or self-igniting materials.
- Observe regulations for keeping separated.
- Store products only unopened, in original packing.
- Observe special regulations for aerosols.
- Observe TRG 300 (German regulation).

Special storage conditions:
See point 10.2
Keep protected from direct sunlight and temperatures over 50°C.

8. Exposure controls/personal protection

Ensure good ventilation. This can be achieved by local suction or general air extraction.
If this is insufficient to maintain the concentration under the OES, MEL or MAK values, suitable breathing protection should be worn.
Applies only if maximum permissible exposure values are listed here.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>content %</th>
<th>OES, MEL, MAK, TR</th>
<th>BMGV, BAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acetate</td>
<td>1 - 5</td>
<td>200 ppm</td>
<td></td>
</tr>
<tr>
<td>Propan-2-ol</td>
<td>1 - 5</td>
<td>400 ppm (999 mg/m³)</td>
<td></td>
</tr>
</tbody>
</table>
Isobutane  1000 ppm (2400 mg/m³)
Propane    1000 ppm (1800 mg/m³)
Butane     600 ppm (1450 mg/m³)

8.1 Respiratory protection: If OES-, MEL- or MAK-value is exceeded.
   Gas mask filter AX (EN 141).
8.2 Hand protection: Recommended
8.3 Eye protection: Normally not necessary.
8.4 Skin protection: Protective working garments (e.g. safety shoes EN 344, long-sleeved protective working garments)

Additional information on hand protection - No tests have been performed.
Selection made for preparations according to the best available knowledge and information on the ingredients.
Selection of materials derived from glove manufacturer's indications.
Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.
Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.
In the case of preparations the resistance of glove materials cannot be calculated in advance so it has to be tested before use. The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state:</td>
<td>Aerosol</td>
</tr>
<tr>
<td>Substance:</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour:</td>
<td>n.v.</td>
</tr>
<tr>
<td>Odour:</td>
<td>Characteristic</td>
</tr>
<tr>
<td>pH-value undiluted:</td>
<td>n.v.</td>
</tr>
<tr>
<td>Boiling point/range (°C):</td>
<td>-48 bis -1°C *</td>
</tr>
<tr>
<td>Melting point/range (°C):</td>
<td>n.v.</td>
</tr>
<tr>
<td>Flash point (°C):</td>
<td>n.g.</td>
</tr>
<tr>
<td>Ignition temperature:</td>
<td>400°C</td>
</tr>
<tr>
<td>Flammability (solid/gas):</td>
<td>Yes</td>
</tr>
<tr>
<td>Vapour pressure:</td>
<td>3.4bar/20°C, 7.8bar/50°C</td>
</tr>
<tr>
<td>Solubility in water:</td>
<td>partially</td>
</tr>
</tbody>
</table>
* Butane
* Propane

10. Stability and reactivity

10.1 Conditions to avoid
See point 7
Pressure increase will result in danger of bursting.
Heating, open flame, ignition sources

10.2 Materials to avoid
See point 7
Avoid contact with oxidizing agents.
Avoid contact with other chemicals.

10.3 Hazardous decomposition products
See point 5.3

11. Toxicological information

11.1 Acute toxicity and immediate effects
<table>
<thead>
<tr>
<th>Route:</th>
<th>Value:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingestion, LD₅₀ rat oral (mg/kg):</td>
<td>n.v.</td>
</tr>
<tr>
<td>Inhalation, LC₅₀ rat inh.(mg/l/4h):</td>
<td>n.v.</td>
</tr>
<tr>
<td>Skin contact, LD₅₀ rat dermal (mg/kg):</td>
<td>n.v.</td>
</tr>
<tr>
<td>Eye contact:</td>
<td>n.v.</td>
</tr>
</tbody>
</table>

11.2 Delayed and chronic effects
<table>
<thead>
<tr>
<th>Effect:</th>
<th>Value:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitization:</td>
<td>n.g.</td>
</tr>
<tr>
<td>Carcinogenicity:</td>
<td>n.g.</td>
</tr>
<tr>
<td>Mutagenicity:</td>
<td>n.g.</td>
</tr>
<tr>
<td>Reproductive toxicity:</td>
<td>n.g.</td>
</tr>
</tbody>
</table>
Narcosis: Possible

11.3. Further information
No classification according to calculation procedure.
The following may occur:
Inhalation of fumes may have narcotic effect.

12. Ecological information

Water hazard class (Germany): 1
Self classification: Yes (VwVwS)
Persistence and degradability: n.v.
Behaviour in sewage plants: n.v.
Aquatic toxicity: n.v.
Ecological toxicity: n.v.

13. Disposal considerations

13.1. for the material / preparation / residue
EC disposal code no.:
The waste codes are recommendations based on the scheduled use of this product.
Owing to the user's specific conditions for use and disposal, other waste codes may be
allocated under certain circumstances.
16 05 04 gases in pressure containers (including halons) containing dangerous substances
20 01 99 other fractions not otherwise specified
Recommendation:
Pay attention to local and national official regulations
E.g. dispose at suitable refuse site.

13.2 for contaminated packing material
See point 13.1
Pay attention to local and national official regulations

14. Transport information

General statements
UN-Number: 1950

Road/Rail-transport (ADR/RID)
Class/packing-group: 2/-
UN 1950 AEROSOLS
Classification code: 5F
LO: 2

Transport by sea
IMDG-code: 2/- (class/packing-group)
EmS: F-D, S-U
Marine Pollutant: n.a.
AEROSOLS

Transport by air
IATA: 2.1/-/- (class/secondary danger/packing-group)
Aerosols, flammable

Additional information:
Minimum amount regulations have not been taken into account.
Danger code and packing code on request.

15. Regulatory information

Classification according to Dangerous Product Regulations incl. EC Directives
(67/548/EEC and 1999/45/EC)

Symbols: F+
Indications of danger: Extremely flammable
R-phrases: 12 Extremely flammable.
Without adequate ventilation, formation of explosive mixtures may be possible.
S-phrases:
9 Keep container in a well-ventilated place.
23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
35 This material and its container must be disposed of in a safe way.
51 Use only in well-ventilated areas.

Additions:
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C.
Do not pierce or burn, even after use.
Do not spray on a naked flame or any incandescent material.
Keep away from sources of ignition - No smoking.
Keep out of the reach of children.

Observe restrictions: Yes
Observe youth employment law (German regulation).

16. Other information

These details refer to the product as it is delivered.
Storage class VCI (Germany): 2 B
Revised points: 2, 8, 9, 10
The following phrases represent the prescribed R-phrases for the ingredients (designated in point 2).
11 Highly flammable.
36 Irritating to eyes.
66 Repeated exposure may cause skin dryness or cracking.
67 Vapours may cause drowsiness and dizziness.

Legend:
n.a. = not applicable / n.v., k.D.v. = not available / n.g. = not checked / OES = Occupational exposure standard
MEL = Maximum exposure limit / BMGV = Biological monitoring guidance value / MAK = Maximum concentration for work place (Germany)
TRK = Technical guidance concentration (Germany) / BAT = Biological tolerance for work place (Germany)
VbF = Regulations for flammable liquids (Austria)
WGK = water hazard class (Germany) - WGK 3 = very hazardous, WGK 2 = hazardous, WGK 1 = slightly hazardous to water
VOC = Volatile organic compounds / AOX = Adsorbable organic halogen compounds
VwVwS = Administrative Order relating to substances hazardous to water (Germany)
The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.
No responsibility.
These statements were made by:
Gefahrstoffberatung Schnurbusch GmbH & Co. KG Tel.: 05233-9417-0 FAX: 05233-941790
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