

|             |                         |                                                                                                                          |
|-------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>CA08</b> | <b>COSHH ASSESSMENT</b> | <br>Home Heating and Energy Solutions |
|-------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------|

|                            |                 |
|----------------------------|-----------------|
| <b>Trade/Product Name:</b> | <b>Mapp Gas</b> |
|----------------------------|-----------------|

|                            |                                                                                                                       |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <b>Work Process:</b>       | Soldering                                                                                                             |
| <b>Material:</b>           | Butane – Propane mixture                                                                                              |
| <b>Hazardous Contents:</b> | Butane and Propane with other highly flammable petroleum products                                                     |
| <b>Risks to Health:</b>    | Extremely flammable. High concentrations can lead to nausea, headache, and dizziness. Cold Burns to the eyes and skin |

| Persons at Risk (tick appropriate boxes) |            |                |               |
|------------------------------------------|------------|----------------|---------------|
| Employee                                 | Contractor | General Public | Other (State) |
| X                                        | X          |                |               |

| Hazard (tick all that apply)                                                       |                                                                                    |                                                                                    |                                                                                    |                                                                                    |                                                                                     |                                                                                      |                                                                                      |                                                                                      |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  |
| Serious Harm to Health                                                             | Toxic                                                                              | Corrosive                                                                          | Irritant                                                                           | Flammable                                                                          | Oxidiser                                                                            | Explosive                                                                            | Gas Under Pressure                                                                   | Risk to Environment                                                                  |
|                                                                                    |                                                                                    |                                                                                    |                                                                                    | X                                                                                  |                                                                                     |                                                                                      |                                                                                      |                                                                                      |

| Hazard Type (tick all that apply) |        |      |      |      |        |       |               |
|-----------------------------------|--------|------|------|------|--------|-------|---------------|
| Gas                               | Vapour | Mist | Fume | Dust | Liquid | Solid | Other (State) |
| X                                 |        |      |      |      |        |       |               |

| Route of Exposure (tick all that apply) |      |      |           |               |
|-----------------------------------------|------|------|-----------|---------------|
| Inhalation                              | Skin | Eyes | Ingestion | Other (State) |
| X                                       | X    | X    |           |               |

| Workplace Exposure Limit (WEL)                                |                                                                                                                 |                                 |                                                                                                                             |
|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| 600 ppm 8 hour TWA value and 750 ppm in a 10 minute TWA value |                                                                                                                 |                                 |                                                                                                                             |
| <b>Approved Uses:</b>                                         | Liquefied fuel supply source to generate high temperature flame for the soldering and fusion of plumbing joints | <b>Work Method and Control:</b> | Application of naked high temperature flame to melts solder into a liquid in order to seal the joints of plumbing pipe work |
| Personal Protective Equipment (PPE)                           |                                                                                                                 |                                 |                                                                                                                             |
| <b>Gloves:</b>                                                | Under normal use no PPE is required to be worn                                                                  | <b>Goggles:</b>                 | Splashes can be an irritant to the eyes                                                                                     |
| <b>Coveralls:</b>                                             |                                                                                                                 | <b>Coveralls:</b>               | No                                                                                                                          |

|             |                         |                                                                                     |
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|-------------|-------------------------|-------------------------------------------------------------------------------------|

|                           |                                                      |                             |    |                       |                                                  |
|---------------------------|------------------------------------------------------|-----------------------------|----|-----------------------|--------------------------------------------------|
| <b>Training Required:</b> | Plumbing trade basic soldering principles and skills | <b>Health Surveillance:</b> | No | <b>Other (State):</b> | Suitable fire appliance to be sited at all times |
|---------------------------|------------------------------------------------------|-----------------------------|----|-----------------------|--------------------------------------------------|

|                          |                                                                   |                   |                                                                                                                                                                                                                                         |
|--------------------------|-------------------------------------------------------------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Emergency Action:</b> | None Required                                                     | <b>First Aid:</b> | If inhaled remove patient from exposure. Liquid contamination to either the skin or eyes will cause irritant therefore to wash out with water. Ingestion is unlikely but should it occur do not induce vomiting. Drink water to dilute. |
| <b>Fire Precautions:</b> | Dry powder extinguisher for liquid, water gas for other materials | <b>Storage:</b>   | Store gas cylinders upright on all occasions                                                                                                                                                                                            |
| <b>Spillage:</b>         | Not expected                                                      | <b>Handling:</b>  | Ensure adequate ventilation for large quantities                                                                                                                                                                                        |
| <b>Waste:</b>            | Metal cylinder only                                               | <b>Transport:</b> | Prevent potential damage to containers                                                                                                                                                                                                  |

|                     |               |              |          |
|---------------------|---------------|--------------|----------|
| <b>Assessed By:</b> | Craig Knights | <b>Date</b>  | 06/05/25 |
| <b>Reviewed By:</b> |               | <b>Date:</b> |          |
| <b>Approved By:</b> | Gary Robinson | <b>Date:</b> | 06/05/25 |

# Safety Data Sheet

According to regulation (EC) 1907/2006

## MAPP Gas

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|                                                                       |                                                                                   |                                                                                    |
|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| <b>Safety Data Sheet</b><br>according to<br>regulation (EC) 1907/2006 | Creation date: 16.08.2006<br>Reviewed on: 07.07.2009<br>Printing date: 16.07.2009 |  |
|                                                                       | Art.-No.: 3.5551                                                                  | <b>MAPP Gas</b>                                                                    |

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

|                                          |                                                                                                         |
|------------------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>Identification:</b>                   | <b>MAPP Gas</b>                                                                                         |
| <b>Use of the substance/preparation:</b> | soldering gas                                                                                           |
| <b>Company:</b>                          | <b>ROTHENBERGER Werkzeuge GmbH</b><br>Industriestr. 7<br>65779 Kelkheim<br>Phone: + 49 (0) 6195 – 800 1 |
| <b>Emergency telephone:</b>              | Phone: + 49 (0) 6195 – 800 1                                                                            |

## 2. Hazards identification

### Hazard description:



F+ Extremely flammable

### Information concerning particular hazards for human and environment:

Heightened risk of fire and danger of explosion at accumulation in lower-lying or closed rooms

Danger of suffocation at accumulation in lower-lying or closed rooms

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 12 Extremely flammable.

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.

Buildup of explosive mixtures possible without sufficient ventilation.

Keep out of the reach of children

### Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

## 3. Composition / information on ingredients

### Chemical characterization

**Description:** Mixture of substances listed below with nonhazardous additions.

### Dangerous components:

|                   |         |                                                                                     |          |         |
|-------------------|---------|-------------------------------------------------------------------------------------|----------|---------|
| CAS: 115-07-1     | propene |  | F+; R 12 | 50-100% |
| EINECS: 204-062-1 |         |                                                                                     |          |         |

|                   |          |                                                                                     |          |        |
|-------------------|----------|-------------------------------------------------------------------------------------|----------|--------|
| CAS: 75-28-5 I    | sobutane |  | F+; R 12 | 10-25% |
| EINECS: 200-857-2 |          |                                                                                     |          |        |

**Additional information:** For the wording of the listed risk phrases refer to section 16.

## 4. First-aid measures

### After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.

### After skin contact:

Generally the product does not irritate the skin.

In cases of frost bites, rinse with plenty of water. Do not remove clothing.

Cover wound with a sterile dressing.

**After eye contact:** Rinse opened eye for several minutes under running water.

**After swallowing:** If symptoms persist consult doctor.

### Information for doctor:

|                                                                       |                                                                                   |                                                                                    |
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|                                                                       | Art.-No.: 3.5551                                                                  | <b>MAPP Gas</b>                                                                    |

**The following symptoms may occur:**

Dizziness  
 Unconsciousness  
 Nausea  
 Frost bites

## 5. Fire-fighting measures

**Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Special hazards caused by the substance, its products of combustion or resulting gases:**

Can form explosive gas-air mixtures.

Under certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:

Carbon monoxide (CO)

**Protective equipment:** Wear self-contained respiratory protective device.

**Additional information** Cool endangered receptacles with water spray.

## 6. Accidental release measures

**Person-related safety precautions:**

Wear protective equipment. Keep unprotected persons away.

Remove persons from danger area.

Ensure adequate ventilation

Keep away from ignition sources.

**Measures for environmental protection:** Prevent seepage into sewage system, workpits and cellars.

**Measures for cleaning/collecting:**

Ensure adequate ventilation.

Allow to evaporate.

## 7. Handling and storage

**Handling:**

**Information for safe handling:**

Open and handle receptacle with care.

Store in cool, dry place in tightly closed receptacles.

Keep away from heat and direct sunlight.

Ensure good ventilation/exhaustion at the workplace.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

**Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

**Storage:**

**Requirements to be met by storerooms and receptacles:** Store in a cool location.

**Information about storage in one common storage facility:** Not required.

**Further information about storage conditions:**

Keep container tightly sealed.

Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.

Protect from heat and direct sunlight.

## 8. Exposure controls / personal protection

**Additional information about design of technical facilities:** No further data; see item 7.

**Ingredients with limit values that require monitoring at the workplace:**

115-07-1 propene

OES Asphyxiant

**Additional information:** The lists valid during the making were used as basis.

**Personal protective equipment:**

**General protective and hygienic measures:** Wash hands before breaks and at the end of work.

**Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation.

**Protection of hands:**

Heat resistant gloves

|                                                                       |                                                                                   |                                                                                    |
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|                                                                       | Art.-No.: 3.5551                                                                  | <b>MAPP Gas</b>                                                                    |

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

#### Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

#### Eye protection:



Tightly sealed goggles

### 9. Physicla and chemical properties

#### General Information

|                                                |                                                                                              |
|------------------------------------------------|----------------------------------------------------------------------------------------------|
| <b>Form:</b>                                   | Compressed liquefied gas                                                                     |
| <b>Colour:</b>                                 | Colourless                                                                                   |
| <b>Odour:</b>                                  | Sweetish                                                                                     |
| <b>Change in condition</b>                     |                                                                                              |
| <b>Melting point/Melting range:</b>            | Undetermined.                                                                                |
| <b>Boiling point/Boiling range:</b>            | -47°C                                                                                        |
| <b>Flash point:</b>                            | -100°C                                                                                       |
| <b>Ignition temperature:</b>                   | 455°C                                                                                        |
| <b>Self-igniting:</b>                          | Product is not selfigniting.                                                                 |
| <b>Danger of explosion:</b>                    | Product is not explosive. However, formation of explosive air/ vapour mixtures are possible. |
| <b>Explosion limits:</b>                       |                                                                                              |
| <b>Lower:</b>                                  | 1.8 Vol %                                                                                    |
| <b>Upper:</b>                                  | 11.1 Vol %                                                                                   |
| <b>Vapour pressure at 20°C:</b>                | 9 bar                                                                                        |
| <b>Density at 20°C:</b>                        | 0.6 g/cm <sup>3</sup>                                                                        |
| <b>Solubility in / Miscibility with water:</b> | Slightly soluble.                                                                            |

### 10.Stability and reactivity

#### Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

#### Dangerous reactions

Forms explosive gas mixture with air.

Danger of bursting.

**Dangerous decomposition products:** Carbon monoxide and carbon dioxide

### 11. Toxicological information

#### Acute toxicity:

#### Primary irritant effect:

**on the skin:** No irritant effect.

**on the eye:** No irritating effect.

**Sensitization:** No sensitizing effects known.

### 12. Ecological information

**General notes:** Generally not hazardous for water

### 13. Disposal considerations

#### Product:

#### Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

|                                                                       |                                                                                   |                                                                                    |
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|                                                                       | Art.-No.: 3.5551                                                                  | <b>MAPP Gas</b>                                                                    |

#### European waste catalogue

|          |                                                                                 |
|----------|---------------------------------------------------------------------------------|
| 16 00 00 | WASTES NOT OTHERWISE SPECIFIED IN THE LIST                                      |
| 16 05 00 | gases in pressure containers and discarded chemicals                            |
| 16 05 04 | gases in pressure containers (including halons) containing dangerous substances |

#### Uncleaned packaging:

**Recommendation:** Disposal must be made according to official regulations.

### 14. Transport information

#### Land transport ADR/RID (cross-border)



|                                 |                |
|---------------------------------|----------------|
| <b>ADR/RID class:</b>           | 2 2F Gases.    |
| <b>Danger code (Kemler):</b>    | 23             |
| <b>UN-Number:</b>               | 1077           |
| <b>Hazard label</b>             | 2.1            |
| <b>Description of goods:</b>    | 1077 PROPYLENE |
| <b>Maritime transport IMDG:</b> |                |



|                                            |           |
|--------------------------------------------|-----------|
| <b>UN Number:</b>                          | 1077      |
| <b>Label</b>                               | 2.1       |
| <b>Marine pollutant:</b>                   | No        |
| <b>Proper shipping name:</b>               | PROPYLENE |
| <b>Air transport ICAO-TI and IATA-DGR:</b> |           |



|                              |           |
|------------------------------|-----------|
| <b>UN/ID Number:</b>         | 1077      |
| <b>Label</b>                 | 2.1       |
| <b>Proper shipping name:</b> | PROPYLENE |

### 15. Regulatory information

#### Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

#### Code letter and hazard designation of product:

F+ Extremely flammable

#### Risk phrases:

12 Extremely flammable.

#### Safety phrases:

- 2 Keep out of the reach of children.
- 3 Keep in a cool place.
- 9 Keep container in a well-ventilated place.
- 16 Keep away from sources of ignition - No smoking.
- 33 Take precautionary measures against static discharges.
- 29 Do not empty into drains.

#### Special labelling of certain preparations:

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.

Buildup of explosive mixtures possible without sufficient ventilation.

Keep out of the reach of children

|                                                                       |                                                                                   |                                                                                    |
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**National regulations:**

**Waterhazard class:** Generally not hazardous for water.

**16. Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Relevant R-phrases**

12 Extremely flammable.