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

1.1. Product identifier
Flux-Off

1.2. Relevant identified uses of the substance or mixture and uses advised against
Uses advised against
Reserved for industrial and professional use.

1.3. Details of the supplier of the safety data sheet

Company name: ITW LLC & Co. KG
Street: Mühlackerstrasse 149
Place: D-75417 Mühlacker
Telephone: ++49(0)7041-96340
Telefax: ++49(0)7041-963429
E-mail: info@itwcp.de
Internet: www.itwcp.de
Responsible Department: Produktsicherheit

1.4. Emergency telephone number:
++49(0)7041-96340
Mo. - Do. 8.00 - 16.30  Fr. 8.00 - 14.00

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC
Indications of danger: F+ - Extremely flammable, Xi - Irritant, N - Dangerous for the environment
R phrases:
Extremely flammable.
Irritating to eyes and respiratory system.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Vapours may cause drowsiness and dizziness.

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hazard categories:
Aerosol: Aerosol 1
Serious eye damage/eye irritation: Eye Irrit. 2
Specific target organ toxicity - single exposure: STOT SE 3
Hazardous to the aquatic environment: Aquatic Chronic 2
Hazard Statements:
Extremely flammable aerosol.
Pressurised container: May burst if heated.
May cause respiratory irritation.
Causes serious eye irritation.
Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazardous components which must be listed on the label
n-butyl acetate Isopropanol aromatic hydrocarbons

Signal word: Danger
Pictograms: GHS02-GHS07-GHS09
Flux-Off

Safety Data Sheet

Product code: 107

Hazard statements

H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H335 May cause respiratory irritation.
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P273 Avoid release to the environment.
P271 Use only outdoors or in a well-ventilated area.
P251 Do not pierce or burn, even after use.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

<table>
<thead>
<tr>
<th>EC No</th>
<th>CAS No</th>
<th>Index No</th>
<th>REACH No</th>
<th>Chemical name</th>
<th>Classification according to Directive 67/548/EEC</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>64742-95-6</td>
<td></td>
<td></td>
<td>propan-2-ol; isopropyl alcohol; isopropanol</td>
<td>Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336</td>
<td>F - Highly flammable, Xi - Irritant R11-36-67</td>
<td>25-50%</td>
</tr>
<tr>
<td></td>
<td>200-661-7</td>
<td></td>
<td></td>
<td>n-butyl acetate</td>
<td>Flam. Liq. 3, STOT SE 3; H226 H336 EUH066</td>
<td></td>
<td>10-25%</td>
</tr>
<tr>
<td></td>
<td>123-86-4</td>
<td></td>
<td></td>
<td>R10-66-67</td>
<td>Flam. Liq. 3, STOT SE 3; H226 H336 EUH066</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>607-025-00-1</td>
<td></td>
<td></td>
<td>1-Methoxy-2-propanol</td>
<td>Flam. Liq. 3, STOT SE 3; H226 H336 EUH066</td>
<td>F - Highly flammable, Xn - Harmful, Xi - Irritant R11-22-36/37/38</td>
<td>5-10 %</td>
</tr>
<tr>
<td></td>
<td>203-539-1</td>
<td></td>
<td></td>
<td>dimethoxymethane</td>
<td>Flam. Liq. 3, STOT SE 3; H226 H336 EUH066</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>01-2119457435-35</td>
<td></td>
<td></td>
<td>Carbondioxide</td>
<td>Flam. Liq. 3, STOT SE 3; H226 H336 EUH066</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>203-714-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>109-87-5</td>
<td></td>
<td></td>
<td>F - Highly flammable, Xi - Irritant R11-19-36</td>
<td>Flam. Liq. 2, Eye Irrit. 2; H225 H319</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>01-2119664781-31</td>
<td></td>
<td></td>
<td></td>
<td>Flam. Liq. 2, Eye Irrit. 2; H225 H319</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Full text of R-, H- and EUH-phrases: see section 16.
SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation
Provide fresh air. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After contact with skin
After contact with skin, wash immediately with: Water. Change contaminated clothing.

After contact with eyes
If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After ingestion
If swallowed, immediately drink: Water.

4.2. Most important symptoms and effects, both acute and delayed
No data available

4.3. Indication of any immediate medical attention and special treatment needed
No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
Carbon dioxide (CO2). Foam. Extinguishing powder.

Unsuitable extinguishing media
Water with tenside additive. Water.

5.2. Special hazards arising from the substance or mixture
Combustible. Vapours may form explosive mixtures with air. Heating causes rise in pressure with risk of bursting.

5.3. Advice for firefighters
Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information
Suppress gases/vapours/mists with water spray jet. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Remove all sources of ignition. Provide adequate ventilation. Wear a self-contained breathing apparatus and chemical protective clothing.

6.2. Environmental precautions
Do not allow to enter into surface water or drains. Explosion hazard.

6.3. Methods and material for containment and cleaning up
Ventilate affected area.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling
If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.
Advisory on protection against fire and explosion
Keep away from sources of ignition. - No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from sources of ignition. - No smoking.

Advice on storage compatibility
Do not store together with: Material, rich in oxygen, oxidizing.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>fibres/ml</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>107-98-2</td>
<td>1-Methoxypropan-2-ol</td>
<td>100</td>
<td>375</td>
<td></td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>150</td>
<td>560</td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
<tr>
<td>123-86-4</td>
<td>Butyl acetate</td>
<td>150</td>
<td>724</td>
<td></td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>200</td>
<td>966</td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
<tr>
<td>124-38-9</td>
<td>Carbon dioxide</td>
<td>5000</td>
<td>9150</td>
<td></td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15000</td>
<td>27400</td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
<tr>
<td>109-87-5</td>
<td>Dimethoxymethane</td>
<td>1000</td>
<td>3160</td>
<td></td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1250</td>
<td>3950</td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
<tr>
<td>67-63-0</td>
<td>Propan-2-ol</td>
<td>400</td>
<td>999</td>
<td></td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>500</td>
<td>1250</td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls
If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures
Remove contaminated, saturated clothing immediately. Protect skin by using skin protective cream. After work, wash hands and face. When using do not eat or drink.

Eye/face protection
Tightly sealed safety glasses.

Hand protection
DIN EN 374 Tested protective gloves are to be worn: Butyl rubber. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection
Protective clothing:

Respiratory protection
In case of inadequate ventilation wear respiratory protection.
SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>Aerosol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour:</td>
<td>colourless</td>
</tr>
<tr>
<td>Odour:</td>
<td>characteristic</td>
</tr>
</tbody>
</table>

Changes in the physical state

- Initial boiling point and boiling range: 82.4 °C
- Flash point: <0 °C
- Lower explosion limits: 1.2 vol. %
- Upper explosion limits: 12 vol. %
- Ignition temperature: 270 °C
- Vapour pressure: 40 hPa
- (at 20 °C)
- Density (at 20 °C): 0.84 g/cm³
- Solvent content: 95%

SECTION 10: Stability and reactivity

10.1. Reactivity
No data available

10.2. Chemical stability
No data available

10.3. Possibility of hazardous reactions
No data available

10.4. Conditions to avoid
Keep away from heat. Ignition hazard.

10.5. Incompatible materials
No data available

10.6. Hazardous decomposition products
No data available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

- Irritation and corrosivity
  - Irritating to eyes. Following inhalation: Lung irritation. Coughing, shortage of breath. After skin contact: Irritant.

- Additional information on tests
  - The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

SECTION 12: Ecological information

12.1. Toxicity
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Further information
Do not allow to enter into surface water or drains. The classification was carried out according to the
### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**Advice on disposal**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

**Waste disposal number of waste from residues/unused products**

160504  WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing dangerous substances Classified as hazardous waste.

**Waste disposal number of contaminated packaging**

150104  WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging

**Contaminated packaging**

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

14.1. UN number: UN1950  
14.2. UN proper shipping name: AEROSOLS  
14.3. Transport hazard class(es): 2  
Hazard label: 2.1  
Classification code: 5F  
Special Provisions: 190 327 625  
Limited quantity: 1 L  
Transport category: 2  
Tunnel restriction code: D  
**Other applicable information (land transport)**  
E0

#### Inland waterways transport (ADN)

14.1. UN number: UN1950  
14.2. UN proper shipping name: AEROSOLS  
14.3. Transport hazard class(es): 2  
Hazard label: 2.1  
Classification code: 5F  
Special Provisions: 190 327 344 625  
Limited quantity: 1 L  
**Other applicable information (inland waterways transport)**  
E0
Marine transport (IMDG)

14.1. UN number: UN1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group: -
Hazard label: 2, see SP63

Special Provisions: 63, 190, 277, 327, 344, 959
Limited quantity: See SP277
EmS: F-D, S-U

Other applicable information (marine transport)
E0

Air transport (ICAO)

14.1. UN number: UN1950
14.2. UN proper shipping name: AEROSOLS, flammable
14.3. Transport hazard class(es): 2.1
Hazard label: 2.1

Special Provisions: A145 A167
Limited quantity Passenger: 30 kg G
IATA-packing instructions - Passenger: 203
IATA-max. quantity - Passenger: 75 kg
IATA-packing instructions - Cargo: 203
IATA-max. quantity - Cargo: 150 kg

Other applicable information (air transport)
E0
: Y203

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes

Danger releasing substance: Solvent Naphta Light

SECTION 15: Regulatory information

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

EU regulatory information
2004/42/EC (VOC): 6,45 % (54,18 g/l)

National regulatory information
Water contaminating class (D): 2 - water contaminating

SECTION 16: Other information
Relevant R-phrases (Number and full text)

10 Flammable.
11 Highly flammable.
19 May form explosive peroxides.
22 Harmful if swallowed.
36 Irritating to eyes.
36/37/38 Irritating to eyes, respiratory system and skin.
37 Irritating to respiratory system.
51 Toxic to aquatic organisms.
53 May cause long-term adverse effects in the aquatic environment.
65 Harmful: may cause lung damage if swallowed.
66 Repeated exposure may cause skin dryness or cracking.
67 Vapours may cause drowsiness and dizziness.

Relevant H- and EUH-phrases (Number and full text)

H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapour.
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.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)