

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

**1.1. Product identifier**

390-C, 390-RX-HT, 390-RX-HT+, BF-1301

**Further trade names**

This MSDS covers the following products:

- 390-C
- 390-RX-HT
- 390-RX-HT+
- BF-1301

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

**Use of the substance/mixture**

Fluxes for soft soldering

**Uses advised against**

any non-intended use.

**1.3. Details of the supplier of the safety data sheet**

**Manufacturer:DKL Metals Ltd**

**Avontoun Works**

**Linlithgow**

**West Lothian**

**EH49 6QD**

**Tel: +44 (0)1506 847710**

**Fax: +44 (0)1506 848199**

**e-mail: sales@dklmetals.co.uk**

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**Regulation (EC) No. 1272/2008**

Hazard categories:

Flammable liquid: Flam. Liq. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

Highly flammable liquid and vapour.

Causes serious eye irritation.

May cause drowsiness or dizziness.

**2.2. Label elements**

**Regulation (EC) No. 1272/2008**

**Hazard components for labelling**

propan-2-ol; isopropyl alcohol; isopropanol

**Signal word:** Danger

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

**390-C, 390-RX-HT, 390-RX-HT+, BF-1301**

Revision date: 24.11.2016

Product code: 950310

Page 2 of 14

## Pictograms:



## Hazard statements

H225 Highly flammable liquid and vapour.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.

## Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P312 Call a POISON CENTER/doctor if you feel unwell.  
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.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

## 2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.  
In use, may form flammable/explosive vapour-air mixture.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous components

| CAS No   | Chemical name   | Quantity     |                  |             |
|----------|---|--------------|------------------|-------------|
|          | EC No   | Index No     | REACH No         |             |
|          | Classification according to Regulation (EC) No. 1272/2008 [CLP] |              |                  |             |
| 67-63-0  | propan-2-ol; isopropyl alcohol; isopropanol                     |              |                  | 85 - < 90 % |
|          | 200-661-7   | 603-117-00-0 | 01-2119457558-25 |             |
|          | Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336           |              |                  |             |
| 124-04-9 | adipic acid   |              |                  | 1 - < 5 %   |
|          | 204-673-3   | 607-144-00-9 | 01-2119457561-38 |             |
|          | Eye Irrit. 2; H319  |              |                  |             |

Full text of H and EUH statements: see section 16.

#### Further Information

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH).

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Change contaminated clothing.  
First aider: Pay attention to self-protection!

#### After inhalation

Remove person to fresh air and keep comfortable for breathing. In case of respiratory tract irritation, consult a physician.

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

**390-C, 390-RX-HT, 390-RX-HT+, BF-1301**

Revision date: 24.11.2016

Product code: 950310

Page 3 of 14

## **After contact with skin**

Take off immediately all contaminated clothing. Wash with plenty of water. In case of skin irritation, seek medical treatment.

## **After contact with eyes**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

## **After ingestion**

Rinse mouth thoroughly with water. Let water be drunk in little sips (dilution effect). Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps. In all cases of doubt, or when symptoms persist, seek medical advice.

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

refer to chapter 2 and 11.

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

Treat symptomatically.

## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

#### **Suitable extinguishing media**

Carbon dioxide (CO<sub>2</sub>). Dry extinguishing powder. alcohol resistant foam.  
In case of major fire and large quantities: Atomized water.

#### **Unsuitable extinguishing media**

High power water jet.

### **5.2. Special hazards arising from the substance or mixture**

Can be released in case of fire: Gas/vapours, irritant. Carbon monoxide. Carbon dioxide (CO<sub>2</sub>).

### **5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus. In case of fire and/or explosion do not breathe fumes.

### **Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Use water spray jet to protect personnel and to cool endangered containers.

In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

Remove persons to safety. Remove all sources of ignition. Ventilate affected area.

Do not breathe gas/vapour/aerosol. Avoid contact with skin, eyes and clothes.

Wear personal protection equipment. (See section 8.)

### **6.2. Environmental precautions**

Do not allow to enter into surface water or drains. Cover drains. Prevent spread over a wide area (e.g. by containment or oil barriers). In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

### **6.3. Methods and material for containment and cleaning up**

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Ventilate affected area.

Treat the recovered material as prescribed in the section on waste disposal.

Clean contaminated objects and areas thoroughly observing environmental regulations.

### **6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

**390-C, 390-RX-HT, 390-RX-HT+, BF-1301**

Revision date: 24.11.2016

Product code: 950310

Page 4 of 14

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### **Advice on safe handling**

Provide adequate ventilation as well as local exhaustion at critical locations.  
Do not breathe gas/vapour/aerosol. Avoid contact with skin, eyes and clothes.  
Wear suitable protective clothing. (See section 8.)

#### **Advice on protection against fire and explosion**

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges.  
Flammable vapours can accumulate in head space of closed systems. In use, may form flammable/explosive vapour-air mixture. Heating causes rise in pressure with risk of bursting.

#### **Further information on handling**

General protection and hygiene measures: See section 8.

### 7.2. Conditions for safe storage, including any incompatibilities

#### **Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place. Protect against direct sunlight.  
Ensure adequate ventilation of the storage area.  
Make sure spills can be contained (e.g. sump pallets or kerbed areas).

#### **Advice on storage compatibility**

Do not store together with: Gas. Explosives. Flammable solids. Pyrophoric liquids and solids. Self-heating substances and mixtures. Substances and mixtures which, in contact with water, emit flammable gases.  
Oxidizing liquids. Oxidizing solids. Ammonium nitrate and preparations containing ammonium nitrate.  
Self-reactive substances and mixtures. Organic peroxides. Non-combustible toxic substances. Radioactive substances. Infectious substances.

#### **Further information on storage conditions**

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.  
Protect against: UV-radiation/sunlight. heat. moisture. frost.  
storage temperature: refer to specifications.

### 7.3. Specific end use(s)

refer to chapter 1.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### **Exposure limits (EH40)**

| CAS No  | Substance   | ppm | mg/m <sup>3</sup> | fibres/ml | Category      | Origin |
|---------|-------------|-----|-------------------|-----------|---------------|--------|
| 67-63-0 | Propan-2-ol | 400 | 999               |           | TWA (8 h)     | WEL    |
|         |             | 500 | 1250              |           | STEL (15 min) | WEL    |

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

**390-C, 390-RX-HT, 390-RX-HT+, BF-1301**

Revision date: 24.11.2016

Product code: 950310

Page 5 of 14

## DNEL/DMEL values

| CAS No                   | Substance                                   |          |                       |
|--------------------------|---|----------|-----------------------|
| DNEL type                | Exposure route                              | Effect   | Value                 |
| 67-63-0                  | propan-2-ol; isopropyl alcohol; isopropanol |          |                       |
| Worker DNEL, long-term   | inhalation                                  | systemic | 500 mg/m <sup>3</sup> |
| Consumer DNEL, long-term | inhalation                                  | systemic | 89 mg/m <sup>3</sup>  |
| Worker DNEL, long-term   | dermal                                      | systemic | 888 mg/kg bw/day      |
| Consumer DNEL, long-term | oral  | systemic | 26 mg/kg bw/day       |
| Consumer DNEL, long-term | dermal                                      | systemic | 319 mg/kg bw/day      |
| 124-04-9                 | adipic acid                                 |          |                       |
| Worker DNEL, acute       | inhalation                                  | systemic | 264 mg/m <sup>3</sup> |
| Worker DNEL, acute       | inhalation                                  | local    | 5 mg/m <sup>3</sup>   |
| Consumer DNEL, long-term | inhalation                                  | systemic | 65 mg/m <sup>3</sup>  |
| Worker DNEL, long-term   | dermal                                      | systemic | 38 mg/kg bw/day       |
| Consumer DNEL, acute     | inhalation                                  | systemic | 65 mg/m <sup>3</sup>  |
| Worker DNEL, acute       | dermal                                      | systemic | 38 mg/kg bw/day       |
| Consumer DNEL, long-term | dermal                                      | systemic | 19 mg/kg bw/day       |
| Consumer DNEL, long-term | oral  | systemic | 19 mg/kg bw/day       |
| Consumer DNEL, acute     | oral  | systemic | 19 mg/kg bw/day       |
| Consumer DNEL, acute     | dermal                                      | systemic | 19 mg/kg bw/day       |
| Worker DNEL, long-term   | inhalation                                  | local    | 5 mg/m <sup>3</sup>   |
| Worker DNEL, long-term   | inhalation                                  | systemic | 264 mg/m <sup>3</sup> |

## PNEC values

| CAS No   | Substance                                   |  |
|--|---|--|
| Environmental compartment                        | Value                                       |  |
| 67-63-0  | propan-2-ol; isopropyl alcohol; isopropanol |  |
| Freshwater                                       | 140,9 mg/l                                  |  |
| Marine water                                     | 140,9 mg/l                                  |  |
| Micro-organisms in sewage treatment plants (STP) | 2251 mg/l                                   |  |
| Freshwater sediment                              | 552 mg/kg                                   |  |
| Marine sediment                                  | 552 mg/kg                                   |  |
| Soil   | 28 mg/kg                                    |  |
| Secondary poisoning                              | 160 mg/kg                                   |  |
| 124-04-9   | adipic acid                                 |  |
| Freshwater                                       | 0,126 mg/l                                  |  |
| Marine water                                     | 0,0126 mg/l                                 |  |
| Freshwater sediment                              | 0,484 mg/kg                                 |  |
| Marine sediment                                  | 0,0484 mg/kg                                |  |
| Micro-organisms in sewage treatment plants (STP) | 59,1 mg/l                                   |  |
| Soil   | 0,0228 mg/kg                                |  |

## 8.2. Exposure controls

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

**390-C, 390-RX-HT, 390-RX-HT+, BF-1301**

Revision date: 24.11.2016

Product code: 950310

Page 6 of 14



## Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

## Protective and hygiene measures

The usual precautions for handling chemicals should be considered.

Keep away from food, drink and animal feedingstuffs.

Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Protect skin by using skin protective cream. Take off contaminated clothing.

## Eye/face protection

Recommended eye protection brand: Tightly sealed safety glasses. (DIN EN 166)

## Hand protection

In case of prolonged or frequently repeated skin contact: Wear suitable gloves.

Suitable material: Butyl rubber.

Thickness of glove material: 0,5 mm

penetration time (maximum wearing period): 120 min.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

In the case of wanting to use the gloves again, clean them before taking off and air them well. Before using check leak tightness / impermeability.

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

Wear suitable protective clothing.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

## Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

exceeding exposure limit values

Insufficient ventilation.

Suitable respiratory protective equipment: gas filtering equipment (EN 141). Type: A

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

## Environmental exposure controls

Do not allow uncontrolled discharge of product into the environment.

This material and its container must be disposed of in a safe way.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|                 |                     |
|-----------------|---------------------|
| Physical state: | liquid.             |
| Colour:         | colourless - yellow |
| Odour:          | alcoholic.          |

#### Test method

|           |                |
|-----------|----------------|
| pH-Value: | not determined |
|-----------|----------------|

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

**390-C, 390-RX-HT, 390-RX-HT+, BF-1301**

Revision date: 24.11.2016

Product code: 950310

Page 7 of 14

## Changes in the physical state

|  |                          |
|--|--------------------------|
| Melting point:                           | not applicable           |
| Initial boiling point and boiling range: | Isopropyl alcohol: 82 °C |
| Sublimation point:                       | not determined           |
| Softening point:                         | not determined           |
| Pour point:                              | not determined           |
| Flash point:                             | Isopropyl alcohol: 12 °C |

## Explosive properties

In use, may form flammable/explosive vapour-air mixture. Vapours can travel considerable distances to a source of ignition where they can ignite, flash back, or explode.

|                            |                |
|----------------------------|----------------|
| Lower explosion limits:    | not determined |
| Upper explosion limits:    | not determined |
| Ignition temperature:      | not determined |
| Decomposition temperature: | not determined |

## Oxidizing properties

none.

|                                |                             |
|--------------------------------|-----------------------------|
| Vapour pressure:<br>(at 20 °C) | not determined              |
| Density:                       | 0,813 g/cm <sup>3</sup> N/A |
| Water solubility:              | miscible.                   |

## Solubility in other solvents

not determined

|                                      |                |
|--------------------------------------|----------------|
| Viscosity / dynamic:<br>(at 20 °C)   | not determined |
| Viscosity / kinematic:<br>(at 20 °C) | not determined |
| Flow time:                           | not determined |
| Vapour density:                      | not determined |
| Evaporation rate:                    | not determined |

## 9.2. Other information

|                |                |
|----------------|----------------|
| Solid content: | not determined |
|----------------|----------------|

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No information available.

### 10.2. Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

### 10.3. Possibility of hazardous reactions

No information available.

### 10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. heat. moisture.  
In use may form flammable/explosive vapour-air mixture.  
Heating causes rise in pressure with risk of bursting.

### 10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong. Strong acid. strong alkalis (Base)

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**390-C, 390-RX-HT, 390-RX-HT+, BF-1301**

Revision date: 24.11.2016

Product code: 950310

Page 8 of 14

### 10.6. Hazardous decomposition products

Can be released in case of fire: Gas/vapours, irritant. Carbon monoxide. Carbon dioxide (CO<sub>2</sub>).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Toxicokinetics, metabolism and distribution

No data available.

#### Acute toxicity

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

| CAS No   | Chemical name                               |                  |         |              |        |
|----------|---|------------------|---------|--------------|--------|
|          | Exposure route                              | Dose             | Species | Source       | Method |
| 67-63-0  | propan-2-ol; isopropyl alcohol; isopropanol |                  |         |              |        |
|          | oral  | LD50 >5000 mg/kg | Rat     | ECHA Dossier |        |
|          | dermal                                      | LD50 >5000 mg/kg | Rabbit  | RTECS        |        |
| 124-04-9 | adipic acid                                 |                  |         |              |        |
|          | oral  | LD50 5560 mg/kg  | Rat     | ECHA Dossier |        |
|          | dermal                                      | LD50 5010 mg/kg  | Rat     | ECHA Dossier |        |
|          | inhalative (4 h) aerosol                    | LC50 > 7,7 mg/l  | Rat     | ECHA Dossier |        |

#### Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

#### Sensitising effects

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

#### Carcinogenic/mutagenic/toxic effects for reproduction



# Safety Data Sheet

according to Regulation (EC) No 1907/2006

**390-C, 390-RX-HT, 390-RX-HT+, BF-1301**

Revision date: 24.11.2016

Product code: 950310

Page 9 of 14

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

Isopropyl alcohol. (CAS-No.: 67-63-0):

In-vitro mutagenicity: No experimental indications of mutagenicity in-vitro exist.

Carcinogenicity :

Exposure time: 24 month

Species: Fischer 344 Rat.

Method: OECD Guideline 451

Result: NOEL = 5000 ppm

Literature information: ECHA Dossier

adipic acid (CAS-No.: 124-04-9):

In-vitro mutagenicity: No experimental indications of mutagenicity in-vitro exist.

Carcinogenicity:

Exposure time: 24 month

Species: Carworth Farm strain Rat.

Method: no guideline followed

Result: NOAEL = >3750 mg/kg(bw)/day (male.)

Result: NOAEL = >750 mg/kg(bw)/day (female.)

Developmental toxicity/teratogenicity:

Exposure time: 10d

Species: Wistar Rat.

Method: no guideline followed

Result: NOAEL >= 288 ppm (maternal toxicity)

Result: NOAEL >= 288 ppm (developmental toxicity )

Literature information: ECHA Dossier

## STOT-single exposure

May cause drowsiness or dizziness. (propan-2-ol; isopropyl alcohol; isopropanol)

## STOT-repeated exposure

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

Isopropyl alcohol. (CAS-No.: 67-63-0):

Chronic inhalative toxicity

Exposure time: 24 month

Species: Fischer 344 Rat.

Method: OECD Guideline 451

Result: NOAEC = 5000 ppm

Literature information: ECHA Dossier

adipic acid (CAS-No.: 124-04-9):

Chronic oral toxicity

Exposure time: 24 month

Species: Carworth Farm strain Rat.

Result: NOAEL = 750 mg/kg(bw)/day

Literature information: ECHA Dossier

## Aspiration hazard

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

## Specific effects in experiment on an animal

No data available.

## Further information

Solvents:

Symptoms: Depression of the central nervous system. Liver and kidney damage. drowsiness. vomiting.

Nausea. Dizziness. unconsciousness. Impaired consciousness. Intoxication. erythema (redness)

## SECTION 12: Ecological information

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

**390-C, 390-RX-HT, 390-RX-HT+, BF-1301**

Revision date: 24.11.2016

Product code: 950310

Page 10 of 14

## 12.1. Toxicity

| CAS No   | Chemical name                               |               |           |         |  |               |
|----------|---|---------------|-----------|---------|--|---------------|
|          | Aquatic toxicity                            | Dose          | [h]   [d] | Species | Source                                     | Method        |
| 67-63-0  | propan-2-ol; isopropyl alcohol; isopropanol |               |           |         |  |               |
|          | Acute fish toxicity                         | LC50<br>mg/l  | 9640      | 96 h    | Pimephales promelas                        | ECHA Dossier  |
|          | Acute algae toxicity                        | ErC50<br>mg/l | >1000     | 72 h    | Scenedesmus<br>subspicatus                 | MSDS external |
|          | Acute crustacea toxicity                    | EC50<br>mg/l  | 1400      | 48 h    | Daphnia magna                              | GESTIS        |
| 124-04-9 | adipic acid                                 |               |           |         |  |               |
|          | Acute fish toxicity                         | LC50<br>mg/l  | 1000      | 96 h    | Danio rerio (OECD<br>203)                  | ECHA Dossier  |
|          | Acute algae toxicity                        | ErC50         | 59 mg/l   | 72 h    | Pseudokirchnerella<br>subcapitata (IUCLID) | ECHA Dossier  |
|          | Acute crustacea toxicity                    | EC50          | 46 mg/l   | 48 h    | Daphnia magna<br>(OECD 202)                | ECHA Dossier  |
|          | Fish toxicity                               | NOEC          | 6,3 mg/l  | 21 d    | Daphnia magna<br>(OECD 211)                | ECHA Dossier  |

## 12.2. Persistence and degradability

| CAS No   | Chemical name                               |       |    |              |  |
|----------|---|-------|----|--------------|--|
|          | Method                                      | Value | d  | Source       |  |
|          | Evaluation                                  |       |    |              |  |
| 67-63-0  | propan-2-ol; isopropyl alcohol; isopropanol |       |    |              |  |
|          | EU Method C.5/ EU Method C.6                | 53%   | 5  | ECHA Dossier |  |
|          | Product is biodegradable.                   |       |    |              |  |
| 124-04-9 | adipic acid                                 |       |    |              |  |
|          | OECD Guideline 301 D                        | 83%   | 30 | ECHA Dossier |  |
|          | Product is biodegradable.                   |       |    |              |  |

## 12.3. Bioaccumulative potential

### Partition coefficient n-octanol/water

| CAS No   | Chemical name                               | Log Pow |
|----------|---|---------|
| 67-63-0  | propan-2-ol; isopropyl alcohol; isopropanol | 0,05    |
| 124-04-9 | adipic acid                                 | 0,093   |

### BCF

| CAS No   | Chemical name | BCF   | Species | Source       |
|----------|---------------|-------|---------|--------------|
| 124-04-9 | adipic acid   | 3,162 | QSAR    | ECHA Dossier |

## 12.4. Mobility in soil

No data available.

## 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

## 12.6. Other adverse effects

No data available.

## Further information

Do not allow to enter into surface water or drains.

## SECTION 13: Disposal considerations

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

**390-C, 390-RX-HT, 390-RX-HT+, BF-1301**

Revision date: 24.11.2016

Product code: 950310

Page 11 of 14

## 13.1. Waste treatment methods

### Advice on disposal

Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process. Control report for waste code/ waste marking according to EAKV:

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

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

### Waste disposal number of used product

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

### Waste disposal number of contaminated packaging

150202 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; absorbents, filter materials, wiping cloths and protective clothing; absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by hazardous substances; hazardous waste

### Contaminated packaging

Handle contaminated packages in the same way as the substance itself.  
Recommended cleaning agent: Water, if necessary together with cleansing agents.  
Do not empty into drains; dispose of this material and its container in a safe way.

## SECTION 14: Transport information

### Land transport (ADR/RID)

|  |                                 |
|--|---------------------------------|
| <b>14.1. UN number:</b>                  | UN 1219                         |
| <b>14.2. UN proper shipping name:</b>    | ISOPROPANOL (ISOPROPYL ALCOHOL) |
| <b>14.3. Transport hazard class(es):</b> | 3                               |
| <b>14.4. Packing group:</b>              | II                              |
| Hazard label:                            | 3                               |



|                          |     |
|--------------------------|-----|
| Classification code:     | F1  |
| Special Provisions:      | 601 |
| Limited quantity:        | 1 L |
| Transport category:      | 2   |
| Hazard No:               | 33  |
| Tunnel restriction code: | D/E |

### Other applicable information (land transport)

Excepted quantity: E2

### Inland waterways transport (ADN)

|  |                                 |
|--|---------------------------------|
| <b>14.1. UN number:</b>                  | UN 1219                         |
| <b>14.2. UN proper shipping name:</b>    | ISOPROPANOL (ISOPROPYL ALCOHOL) |
| <b>14.3. Transport hazard class(es):</b> | 3                               |
| <b>14.4. Packing group:</b>              | II                              |
| Hazard label:                            | 3                               |

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

**390-C, 390-RX-HT, 390-RX-HT+, BF-1301**

Revision date: 24.11.2016

Product code: 950310

Page 12 of 14



Classification code: F1  
Special Provisions: 601  
Limited quantity: 1 L

#### Other applicable information (inland waterways transport)

Excepted quantity: E2

#### Marine transport (IMDG)

**14.1. UN number:** UN 1219  
**14.2. UN proper shipping name:** ISOPROPANOL (ISOPROPYL ALCOHOL)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** II  
Hazard label: 3



Marine pollutant: NO  
Special Provisions: -  
Limited quantity: 1 L  
EmS: F-E, S-D

#### Other applicable information (marine transport)

Excepted quantity: E2

#### Air transport (ICAO-TI/IATA-DGR)

**14.1. UN number:** UN 1219  
**14.2. UN proper shipping name:** ISOPROPANOL (ISOPROPYL ALCOHOL)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** II  
Hazard label: 3



Special Provisions: A180  
Limited quantity Passenger: 1 L  
IATA-packing instructions - Passenger: 353  
IATA-max. quantity - Passenger: 5 L  
IATA-packing instructions - Cargo: 364  
IATA-max. quantity - Cargo: 60 L

#### Other applicable information (air transport)

Excepted quantity: E2  
Passenger-LQ: Y341

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

#### 14.6. Special precautions for user

See section 8.

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

not relevant.

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

**390-C, 390-RX-HT, 390-RX-HT+, BF-1301**

Revision date: 24.11.2016

Product code: 950310

Page 13 of 14

## SECTION 15: Regulatory information

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

#### EU regulatory information

2010/75/EU (VOC): <92,14 % (calculated)  
2004/42/EC (VOC): <784,469 g/l (calculated)  
Information according to 2012/18/EU (SEVESO III): P5c FLAMMABLE LIQUIDS

#### Additional information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].  
REACH 1907/2006 Appendix XVII, No: 3

#### National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).  
Water contaminating class (D): 1 - slightly water contaminating

#### Additional information

Observe technical data sheet.

### 15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:  
propan-2-ol; isopropyl alcohol; isopropanol

## SECTION 16: Other information

#### Changes

Rev. 1.00; 24.02.2015, Initial release  
Rev. 1.1; 24.11.2016, Indication of changes - chapter: 1, 2, 3, 6, 12, 15, 16.

#### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route  
CAS Chemical Abstracts Service  
DNEL: Derived No Effect Level  
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO: International Civil Aviation Organization  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)  
LOAEL: Lowest observed adverse effect level  
LOAEC: Lowest observed adverse effect concentration  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
NOAEL: No observed adverse effect level  
NOAEC: No observed adverse effect level  
NTP: National Toxicology Program  
N/A: not applicable  
OSHA: Occupational Safety and Health Administration  
PNEC: predicted no effect concentration  
PBT: Persistent bioaccumulative toxic  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail )  
SARA: Superfund Amendments and Reauthorization Act

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

**390-C, 390-RX-HT, 390-RX-HT+, BF-1301**

Revision date: 24.11.2016

Product code: 950310

Page 14 of 14

SVHC: substance of very high concern  
TRGS Technische Regeln für Gefahrstoffe  
TSCA: Toxic Substances Control Act  
VOC: Volatile Organic Compounds  
VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe  
WGK: Wassergefährdungsklasse

## Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.

## Further Information

Classification according EC regulation 1272/2008 (CLP): - Classification procedure:

Health hazards: Calculation method.

Environmental hazards: Calculation method.

Physical hazards: On basis of test data. and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

---

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