

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date: 29.02.2008

Revision: 20.05.2005

* 1 Identification of substance:

- **Product details:**

- **Trade name:** Axarel® 2200

- **Article number:**

MCC-AXL101

Aerosol: MCC-AXL, MCC-DAXL, MCC-NAXL

Bulk: MCC-AXLG, MCC-AXLP, MCC-AXLD,

MCC-DAXLG, MCC-DAXLP, MCC-DAXLD,

MCC-NAXLG, MCC-NAXLP, MCC-NAXLD,

- **Application of the substance / the preparation**

Ozone-safe, slow-drying and economical hydrocarbon solvent widely used for defluxing, stencil cleaning and light degreasing

- **Supplier/Manufacturer:**

Micro Care Corporation

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United States of America

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- **Email competent person:** angelika.torges@kft.de

- **Information department:**

Tech support (Micro Care): Tel.: +1-860-827-0626

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- **Emergency information:** National Poisons Information Centre Tel.: +44 (0)870 6006266

2 Hazards identification

- **Hazard description:**



Xn Harmful

- **Information pertaining to particular dangers for man and environment:**

R 10 Flammable.

R 36/38 Irritating to eyes and skin.

R 53 May cause long-term adverse effects in the aquatic environment.

R 65 Harmful: may cause lung damage if swallowed.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

50.0 % by mass of the contents are flammable

Keep out of the reach of children

- **Classification system:**

The classification was made according to the latest editions of the EU-lists, and expanded using company data and specialized literature.

* 3 Composition/information on ingredients

- **Chemical characterization**

- **Description:** Cleaning agent based on a mixture of aliphatic hydrocarbons

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· Dangerous components:

CAS: 1569-01-3	1-propoxypropan-2-ol	30-60%
EINECS: 216-372-4	Xi; R 36/38	
CAS: 90622-57-4	mixed aliphatic hydrocarbons	30-60%
	Xn; R 53-65-66	
CAS: 811-97-2	1,1,1,2-tetrafluorethane	0-20%
EINECS: 212-377-0		

· Additional information

Only the aerosol contains tetrafluoroethane (CAS: 811-79-2).
For the wording of the listed risk phrases refer to section 16.

* 4 First aid measures

· General information:

Immediately remove any clothing soiled by the product.
In case of irregular breathing or respiratory arrest provide artificial respiration.

· After inhalation:

Supply fresh air and be sure to call for a doctor.
In case of unconsciousness, place patients on their side in a stable position for transportation.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.

· After eye contact: Rinse the eyes with open eyelids for 10 - 15 minutes with water. Then consult an eye specialist immediately.**· After swallowing:**

Do not induce vomiting; call for medical help immediately.
If vomiting occurs spontaneously:
Hold the head of the casualty low with the body in a prone position in order to avoid aspiration.

· Information for doctor:**· The following symptoms may occur:**

Local irritation symptoms
After swallowing:
Irritation of mucuous membranes
Nausea
Vomiting
Gastric or intestinal disorders.
Diarrhoea
Daze
Dizziness

· Danger: If swallowed or in case of vomiting, danger of entering the lungs.**· Treatment:** Symptomatic treatment

5 Fire fighting measures

· Suitable extinguishing agents:

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· For safety reasons unsuitable extinguishing agents: Direct jet water**· Special hazards caused by the material, its products of combustion or resulting gases:**

Dangerous decomposition product see chapter 10: stability and reactivity
Formation of toxic gases is possible during heating or in case of fire.

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

Collect contaminated fire fighting water separately. It must not enter the sewage system.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

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Cool endangered receptacles with water spray.

6 Accidental release measures

· Person-related safety precautions:



Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Do not smoke - keep ignition sources away

· Measures for environmental protection:

Do not allow product to reach sewage system or any water course.

Do not allow to penetrate the ground/soil.

· Measures for cleaning/collecting:

Ensure adequate ventilation.

Absorb liquid components with liquid-binding material.

Send for recovery or disposal in suitable receptacles.

Dispose contaminated material as waste according to item 13.

* 7 Handling and storage

· Handling

· Information for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Keep away from heat and direct sunlight.

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

Avoid contact with eyes and skin.

Avoid inhalation of vapours.

· Information about protection against explosions and fires:



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges

Emergency cooling must be available in case of nearby fire.

Flammable gas-air mixtures may be formed in empty receptacles (not valid for the aerosol).

For aerosols you have additionally pay attention to:

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

· Storage

· Requirements to be met by storerooms and receptacles:

Store cool and dry in a well ventilated area.

Store away from open flames, sources of heat or sparks.

Pay attention to special rules for the storage of flammable liquids.

For aerosols you have additionally pay attention to:

Observe official regulations on storing packagings with pressurized containers.

· Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from feed.

Do not store together with oxidizing and acidic materials.

· Further information about storage conditions: Keep receptacle tightly sealed.

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- **Storage class**
- 3A Flammable Liquids
- 2B pressurized gas containers

* 8 Exposure controls and personal protection

- **Additional information about design of technical systems:**

Install appropriate mechanical ventilation.
Keep away from open flames and other ignition sources.
Protect against electrostatic charges.

- **Components with limit values that require monitoring at the workplace:**

811-97-2 1,1,1,2-tetrafluorethane

WEL (Great Britain) Long-term value: 4240 mg/m³, 1000 ppm

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Personal protective equipment**

- **General protective and hygienic measures:**

The usual precautionary measures should be adhered to when handling chemicals.
Wash hands before breaks and at the end of work.
Immediately remove all soiled and contaminated clothing
Avoid close or long term contact with the skin.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
Do not eat or drink while working.
Provide eye bath.

- **Breathing equipment:**

Not necessary if room is well-ventilated.
In case of unintentional release of substance, exceeding the occupational exposure limit value:
Short term filter device:
Filter A

- **Protection of hands:**

Solvent resistant gloves
Check the permeability prior to each renewed use of the glove.
Preventive skin protection by use of skin-protecting agents is recommended.

- **Material of gloves:**

The selection of suitable depends upon the material, and also upon the quality of the gloves. The degree of protection will vary from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **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.

- **Body protection:** Protective work clothing.

9 Physical and chemical properties:

- **General Information**

Form:	Liquid Aerosol
Colour:	Colourless Clear
Odour:	Alcohol-like

- **Change in condition:**

Melting point/Melting range: undetermined
Boiling point/Boiling range: 149-193°C

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- **Flash point:** 44°C (TCC)
- **Self igniting:** Product is not self-igniting.
- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
- **Explosion limits:**
 - Lower:** 2 Vol %
 - Upper:** 12.7 Vol %
- **Vapour pressure at 20°C:** 2 mmHg
- **Density at 25°C:** 0.82 g/cm³
- **Solubility in / Miscibility with Water at 20°C:** 600 g/l

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
Keep away from heat and direct sunlight.
- **Materials to be avoided:**
Strong oxidants
Strong acids
Aldehydes
Acetyl chloride
Halogens
Halogen compounds
- **Dangerous reactions:**
Danger of receptacles bursting because of high vapour pressure if heated
Flammable vapour-air mixtures may develop if stored in large receptacles above room temperature
Used empty containers may contain product gases which form explosive mixtures with air
- **Dangerous products of decomposition:**
In the case of fire or at high temperatures the formation of the following decomposition products is possible.
Carbon monoxide and carbon dioxide

*11 Toxicological information

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**
 - 90622-57-4 mixed aliphatic hydrocarbons**
Dermal LD50 > 10000 mg/kg (rat)
 - 1569-01-3 1-propoxypropan-2-ol**
Dermal LD50 3550 mg/kg (rabbit)
- **Primary irritant effect:**
- **on the skin:**
Irritant to skin and mucous membranes.
Continuing or repeated contact with the skin may cause skin disease.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
After swallowing: irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Harmful

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Inhalation of concentrated vapours as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc.

12 Ecological information

- **Ecotoxicological effects:**
- **Aquatic toxicity:** Presently there are no ecotoxicological values available.
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
According to appendix 4 of VwVwS dated 17.05.1999 (German regulation)
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Danger to drinking water is possible if large quantities leak into the ground or into water course.

13 Disposal considerations

- **Product:**
- **Recommendation:**



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

Disposal according to instructions of local authorities.

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

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



- **ADR/RID class:** Aerosol: 2 (5F) bulk: 3
- **Danger code (Kemler):** Aerosol: - bulk: 30
- **UN-Number:** Aerosol: 1950 bulk: 1993
- **Packaging group:** Aerosol: - bulk: III
- **Label:** Aerosol: 2.1 bulk: 3
- **Description of goods:** Aerosol: Aerosols
bulk: flammable liquid, n.o.s., aliphatic hydrocarbons, 1-propoxy-2-ol
- **Remarks:** Limited Quantity: 1 l inner packing, 30 l packing unit
Limited quantity: 5l per inner packaging, 30 kg gross per packaging unit

- **Maritime transport IMDG:**



- **IMDG Class:** Aerosol: 2 bulk: 3
- **UN Number:** Aerosol: 1950 bulk: 1993
- **Label:** Aerosol: 2 bulk: 3
- **Packaging group:** Aerosol: - bulk: III
- **EMS Number:** F-D, S-U F-E, S-E

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- **Marine pollutant:** -
- **Proper shipping name:** Aerosol: Aerosols
bulk: Flammable Liquid, n.o.s., aliphatic hydrocarbons, 1-propoxy-2-ol
- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** Aerosol: 2.1 bulk: 3
- **UN/ID Number:** Aerosol: 1950 bulk: 1993
- **Label:** AEROSOL: 2.1 bulk: 3
- **Packaging group:** Aerosol: - bulk: III
- **Proper shipping name:** Aerosol: Aerosols, flammable, n.o.s
bulk: Flammable Liquid, n.o.s., aliphatic hydrocarbons, 1-propoxy-2-ol

*15 Regulations

- **Markings according to EC guidelines:**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials
- **Code letter and hazard designation of product:**



Xn Harmful

- **Risk phrases:**
 - 10 Flammable.
 - 36/38 Irritating to eyes and skin.
 - 53 May cause long-term adverse effects in the aquatic environment.
 - 65 Harmful: may cause lung damage if swallowed.
- **Safety phrases:**
 - 23 Do not breathe fumes/aerosol.
 - 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 - 37 Wear suitable gloves.
 - 51 Use only in well-ventilated areas.
 - 60 This material and its container must be disposed of as hazardous waste.
 - 62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.
- **Special labelling of certain preparations:**
 - R 65 and S 62 do not apply to the aerosol.
 - The aerosol is therefore only to be labelled as "irritant" (Xi).
 - Only valid for the aerosol:
 - Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
 - 50.0 % by mass of the contents are flammable
 - Keep out of the reach of children
- **National regulations**
- **Information about limitation of use:** Restrictions on juvenile employment must be observed.
- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

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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.

• Reasons for amendments:

TLV

Regulation (EC) No. 1907/2006

General revision

• Relevant R-phrases:

36/38 Irritating to eyes and skin.

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.

• Department issuing MSDS:

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• Contact: Angelika Torges**• * Data compared to the previous version altered.**

Changes have been made to chapters marked with a *, as compared to the previous version.