



## SAFETY DATA SHEET

### AXL - GENERAL PURPOSE DEGREASER Axarel 2200, AEROSOL

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

#### 1. Identification

##### Product identifier

**Product name** AXL - GENERAL PURPOSE DEGREASER Axarel 2200, AEROSOL

**Product number** MCC-AXL, MCC-AXL101, MCC-DAXL, MCC-NAXL

**Synonyms; trade names** Axarel 2200

##### Recommended use of the chemical and restrictions on use

**Application** Cleaning agent.

##### Details of the supplier of the safety data sheet

**Supplier** MicroCare Corporation

**Manufacturer** MICROCARE CORPORATION  
 595 John Downey Drive  
 New Britain, CT 06051  
 United States of America  
 CAGE: OATV9  
 Tel: +1 860-827-0626  
 Fax: +1 860-827-8105  
 techsupport@microcare.com

##### Emergency telephone number

**Emergency telephone** CHEMTREC (800) 424-9300

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

**Physical hazards** Flam. Aerosol 1 - H222 Press. Gas, Liquefied - H280

**Health hazards** Skin Irrit. 2 - H315

**Environmental hazards** Not Classified

##### Label elements

##### Pictogram



**Signal word** Danger

Danger

##### **Hazard statements**

H222 Extremely flammable aerosol.  
 H280 Contains gas under pressure; may explode if heated.  
 H315 Causes skin irritation.

## AXL - GENERAL PURPOSE DEGREASER Axarel 2200, AEROSOL

<b>Precautionary statements</b>	P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.
	P211 Do not spray on an open flame or other ignition source.
	P251 Pressurized container: Do not pierce or burn, even after use
	P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
	P302+P352 If on skin: Wash with plenty of water.
	P332+P313 If skin irritation occurs: Get medical advice/ attention.
	P410+P403 Protect from sunlight. Store in a well-ventilated place.
P412 Do not expose to temperatures exceeding 50°C/122°F.	

**Supplemental label information** Safety data sheet available on request. For use in industrial installations only.

### Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

### 3. Composition/information on ingredients

#### Mixtures

<b>1-propoxypropan-2-ol</b> CAS number: 1569-01-3	<b>30-60%</b>
<b>Classification</b> Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	
<b>MIXED ALIPHATIC HYDROCARBONS</b> CAS number: 90622-57-4	<b>30-60%</b>
<b>Classification</b> Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	
<b>HFC-134a Tetrafluoroethane</b> CAS number: 811-97-2	<b>10-30%</b>
<b>Classification</b> Press. Gas, Liquefied - H280	

The Full Text for all Hazard Statements are Displayed in Section 16.

**Composition comments** The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of CFR 1900.1200 TSCA: The ingredients of this product are on the TSCA Inventory.

### Composition

### 4. First-aid measures

#### Description of first aid measures

**General information** Move affected person to fresh air at once. Get medical attention if any discomfort continues.

**Inhalation** Move affected person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Keep affected person warm and at rest. Get medical attention immediately.

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<b>Ingestion</b>	Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Never give anything by mouth to an unconscious person. Consult a physician for specific advice.
<b>Skin Contact</b>	Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if irritation persists after washing.
<b>Eye contact</b>	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

### Most important symptoms and effects, both acute and delayed

<b>General information</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
<b>Inhalation</b>	Vapors may cause headache, fatigue, dizziness and nausea.
<b>Ingestion</b>	May cause stomach pain or vomiting. Headache.
<b>Skin contact</b>	Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.
<b>Eye contact</b>	Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain. Irritation and redness, followed by blurred vision.

### Indication of immediate medical attention and special treatment needed

<b>Notes for the doctor</b>	No specific recommendations. If in doubt, get medical attention promptly.
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## 5. Fire-fighting measures

### Extinguishing media

<b>Suitable extinguishing media</b>	Extinguish with the following media: Powder. Dry chemicals, sand, dolomite etc. Water spray, fog or mist.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.

### Special hazards arising from the substance or mixture

<b>Specific hazards</b>	The product is flammable. Heating may generate flammable vapors. Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m <sup>3</sup> . Containers can burst violently or explode when heated, due to excessive pressure build-up.
<b>Hazardous combustion products</b>	Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.
<b>Advice for firefighters</b>	
<b>Protective actions during firefighting</b>	Containers close to fire should be removed or cooled with water. Use water to keep fire exposed containers cool and disperse vapors.
<b>Special protective equipment for firefighters</b>	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Use air-supplied respirator, gloves and protective goggles.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.
<b>Environmental precautions</b>	
<b>Environmental precautions</b>	Do not discharge into drains or watercourses or onto the ground.

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### Methods and material for containment and cleaning up

**Methods for cleaning up** Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. If leakage cannot be stopped, evacuate area. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Absorb in vermiculite, dry sand or earth and place into containers.

**Reference to other sections** For personal protection, see Section 8. See Section 11 for additional information on health hazards.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions** Keep away from heat, sparks and open flame. Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid inhalation of vapors. Use approved respirator if air contamination is above an acceptable level. Keep out of the reach of children.

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

**Storage precautions** Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C.

#### Specific end uses(s)

**Specific end use(s)** Cleaning agent.

**Reference to other sections.** Store away from incompatible materials (see Section 10).

### 8. Exposure Controls/personal protection

#### Control parameters

#### Occupational exposure limits

##### HFC-134a Tetrafluoroethane

Long-term exposure limit (8-hour TWA): OES 4240 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): OES

#### **Additional Occupational Exposure Limits**

**Ingredient comments** WEL = Workplace Exposure Limits

#### Exposure controls

#### Protective equipment



#### **Appropriate engineering controls**

Provide adequate general and local exhaust ventilation.

#### **Eye/face protection**

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

#### **Hand protection**

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Nitrile rubber. Polyvinyl alcohol (PVA). Viton rubber (fluoro rubber).

#### **Other skin and body protection**

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapor contact.

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<b>Hygiene measures</b>	Do not smoke in work area. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.
<b>Respiratory protection</b>	No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

### 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

<b>Appearance</b>	Liquid.
<b>Color</b>	Clear liquid. Colorless.
<b>Odor</b>	Alcoholic. Ester.
<b>Odor threshold</b>	No information available.
<b>pH</b>	No information available.
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	149-193°C/300-380°F @ 101.3 kPa
<b>Flash point</b>	44°C / 111°F Method: TCC (Tag closed cup).
<b>Evaporation rate</b>	No information available.
<b>Evaporation factor</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	Upper flammable/explosive limit: 12.7 %(V) Lower flammable/explosive limit: 2.0 %(V)
<b>Other flammability</b>	No information available.
<b>Vapor pressure</b>	0.27 kPa @ 25°C
<b>Vapor density</b>	5.0
<b>Relative density</b>	No information available.
<b>Bulk density</b>	No information available.
<b>Solubility(ies)</b>	No information available.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	No information available.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	No information available.
<b>Comments</b>	Aerosol.
<b>Refractive index</b>	No information available.
<b>Particle size</b>	No information available.
<b>Molecular weight</b>	Not applicable.
<b>Volatility</b>	100%
<b>Saturation concentration</b>	No information available.
<b>Critical temperature</b>	No information available.

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<b>Volatile organic compound</b>	This product contains a maximum VOC content of 785 g/litre.
<b>Flammability</b>	Flammable aerosol.

### 10. Stability and reactivity

<b>Stability</b>	Stable at normal ambient temperatures.
<b>Possibility of hazardous reactions</b>	Will not polymerize.
<b>Conditions to avoid</b>	Avoid heat, flames and other sources of ignition.
<b>Materials to avoid</b>	Strong oxidizing agents. Strong alkalis. Strong mineral acids.
<b>Hazardous decomposition products</b>	Fire creates: Vapors/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ).

### 11. Toxicological information

#### Information on toxicological effects

<b>Other health effects</b>	There is no evidence that the product can cause cancer.
<b>Inhalation</b>	May cause respiratory system irritation. Vapors may cause headache, fatigue, dizziness and nausea. Prolonged inhalation of high concentrations may damage respiratory system. Gas or vapor in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Headache. Fatigue. Nausea, vomiting.
<b>Ingestion</b>	Ingestion may cause severe irritation of the mouth, the esophagus and the gastrointestinal tract. May cause nausea, headache, dizziness and intoxication. Unconsciousness.
<b>Skin Contact</b>	Product has a defatting effect on skin. May cause skin irritation/eczema.
<b>Eye contact</b>	Irritating to eyes.

#### Toxicological information on ingredients.

##### HFC-134a Tetrafluoroethane

<b>Other health effects</b>	There is no evidence that the product can cause cancer.
<b><u>Acute toxicity - inhalation</u></b>	
<b>Acute toxicity inhalation (LC<sub>50</sub> gases ppmV)</b>	567,000.0
<b>Species</b>	Rat
<b>ATE inhalation (gases ppm)</b>	567,000.0

### 12. Ecological Information

#### Toxicity

#### Ecological information on ingredients.

##### HFC-134a Tetrafluoroethane

<b>Acute toxicity - fish</b>	LC <sub>50</sub> , 96 hours: 450 mg/l, Fish
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**Acute toxicity - aquatic invertebrates**      EC<sub>50</sub>, 48 hours: 980 mg/l, Daphnia magna

**Bioaccumulative potential**

**Partition coefficient**      No information available.

**Ecological information on ingredients.****HFC-134a Tetrafluoroethane**

**Partition coefficient**      Pow: 1.06

**Mobility in soil**

**Mobility**      Not considered to be a significant hazard due to the small quantities used.

**13. Disposal considerations****Waste treatment methods**

**Disposal methods**      Empty containers must not be punctured or incinerated because of the risk of an explosion. Reuse or recycle products wherever possible. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

**14. Transport information****UN Number**

**UN No. (TDG)**      UN1950

**UN No. (IMDG)**      UN1950

**UN No. (ICAO)**      UN1950

**UN No. (DOT)**      UN1950

**UN proper shipping name**

**Proper shipping name (TDG)** UN1950, AEROSOLS, FLAMMABLE, 2.1, LIMITED QUANTITY

**Proper shipping name (IMDG)** UN1950, AEROSOLS, FLAMMABLE, 2.1, LIMITED QUANTITY

**Proper shipping name (ICAO)** UN1950, AEROSOLS, FLAMMABLE, 2.1, LIMITED QUANTITY

**Proper shipping name (DOT)** UN1950, AEROSOLS, FLAMMABLE, 2.1, LIMITED QUANTITY

**Transport hazard class(es)**

**TDG class**      2.1

**TDG label(s)**      2

**IMDG Class**      2.1

**ICAO class/division**      2.1

**ICAO subsidiary risk**      N/A

**Transport labels****Packing group**

**IMDG packing group**      N/A

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ICAO packing group N/A

**Special precautions for user**

EmS F-D, S-U

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

**15. Regulatory information****US Federal Regulations****SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities**

Not listed.

**CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)**

Not listed.

**SARA Extremely Hazardous Substances EPCRA Reportable Quantities**

Not listed.

**SARA 313 Emission Reporting**

Not listed.

**CAA Accidental Release Prevention**

Not listed.

**SARA (311/312) Hazard Categories**

Acute  
Chronic  
Fire  
Pressure

**OSHA Highly Hazardous Chemicals**

Not listed.

**US State Regulations****California Proposition 65 Carcinogens and Reproductive Toxins**

Not listed.

**California Air Toxics "Hot Spots" (A-I)**

Not listed.

**California Air Toxics "Hot Spots" (A-II)**

Not listed.

**California Directors List of Hazardous Substances**

Not listed.

**Massachusetts "Right To Know" List**

Not listed.

**Rhode Island "Right To Know" List**

Not listed.

**Minnesota "Right To Know" List**



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Present.

**New Jersey "Right To Know" List**

Not listed.

**Pennsylvania "Right To Know" List**

Not listed.

**Inventories****Canada - DSL/NDSL**

Yes

**US - TSCA**

All the ingredients are listed.

**16. Other information**

<b>Revision comments</b>	NOTE: Lines within the margin indicate significant changes from the previous revision.
<b>Revision date</b>	2/22/2016
<b>Revision</b>	21
<b>Supersedes date</b>	2/22/2016
<b>SDS No.</b>	AEROSOL - AXL
<b>SDS status</b>	Approved.
<b>Hazard statements in full</b>	H222 Extremely flammable aerosol. H226 Flammable liquid and vapor. H280 Contains gas under pressure; may explode if heated. H315 Causes skin irritation. H319 Causes serious eye irritation.
<b>NFPA - health hazard</b>	Irritation, minor residual injury. (1)
<b>NFPA - flammability hazard</b>	Burns only if heated moderately. (2)
<b>NFPA - instability hazard</b>	Normally stable. (0)
<b>NFPA - special hazard</b>	N/A
<b>ACA HMIS Health rating.</b>	Slight Hazard. (1)
<b>ACA HMIS Flammability rating.</b>	Burns only if heated moderately. (2)
<b>ACA HMIS Physical hazard rating.</b>	Normally stable. (0)
<b>ACA HMIS Personal protection rating.</b>	A

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.