



## SAFETY DATA SHEET

### BAC IPA-BASED FLUX REMOVER- ISOCLEAN, AEROSOL

According to WHMIS 2015, in compliance with the Hazardous Product Act (HPA, as amended) and the requirements of the Hazardous Product Regulations (HPR)

#### 1. Identification

##### Product identifier

**Product name** BAC IPA-BASED FLUX REMOVER- ISOCLEAN, AEROSOL  
**Product number** MCC-BAC, MCC-BAC101  
**Synonyms; Common Names** "BAC - ISOCLEAN, DEFLUXER"

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

**Restriction on use** Cleaning agent.  
**Uses advised against** No specific uses advised against are identified.

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

**Supplier** MICROCARE LLC  
**Manufacturer** MICROCARE LLC  
595 John Downey Drive  
New Britain, CT 06051  
United States of America  
CAGE: OATV9  
Tel: +1 800-638-0125, +1 860-827-0626  
Fax: +1 860-827-8105  
techsupport@microcare.com

##### Emergency telephone number

**Emergency telephone** CHEMTREC 1-800-424-9300 (within the U.S.)  
+1 703-741-5970 (from anywhere in the world)

#### 2. Hazard identification

##### Classification of the substance or mixture

**Physical hazards** Flam. Aerosol 1 - H222 Press. Gas, Compressed - H280  
**Health hazards** Eye Irrit. 2 - H319 STOT SE 3 - H336  
**Environmental hazards** Not Classified  
**Human health** See Section 11 for additional information on health hazards.  
**Environmental** The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential.  
**Physicochemical** The product is highly flammable. Vapours may form explosive mixtures with air. Aerosol containers can explode when heated, due to excessive pressure build-up.

##### Label elements

## BAC IPA-BASED FLUX REMOVER- ISOCLEAN, AEROSOL

### Hazard pictograms



### Signal word

Danger

### Hazard statements

H222 Extremely flammable aerosol.  
 H280 Contains gas under pressure; may explode if heated.  
 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.  
 P211 Do not spray on an open flame or other ignition source.  
 P251 Do not pierce or burn, even after use.  
 P261 Avoid breathing spray.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
 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.  
 P314 Get medical advice/ attention if you feel unwell.  
 P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.  
 P501 Dispose of contents/ container in accordance with national regulations.

### Supplemental label information

Safety data sheet available on request.  
 For use in industrial installations only.

### Contains

PROPAN-2-OL

### Other hazards

This product does not contain any substances classified as PBT or vPvB.

### 3. Composition/information on ingredients

#### Mixtures

<b>PROPAN-2-OL</b>	<b>60-100% Trade secret</b>
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CAS number: 67-63-0

#### Classification

Flam. Liq. 2 - H225  
 Eye Irrit. 2 - H319  
 STOT SE 3 - H336

<b>HFC-134a Tetrafluoroethane</b>	<b>10-30%</b>
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CAS number: 811-97-2

#### Classification

Press. Gas, Liquefied - H280  
 Simple Asphyxiants - Category 1

The full text for all hazard statements is displayed in Section 16.

### Composition comments

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

## BAC IPA-BASED FLUX REMOVER- ISOCLEAN, AEROSOL

### Composition

#### 4. First-aid measures

##### Description of first aid measures

<b>General information</b>	Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.
<b>Inhalation</b>	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention. Place unconscious person on their side in the recovery position and ensure breathing can take place.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Never give anything by mouth to an unconscious person. Place unconscious person on their side in the recovery position and ensure breathing can take place. Keep affected person under observation. Get medical attention if symptoms are severe or persist.
<b>Skin contact</b>	Rinse with water.
<b>Eye contact</b>	Rinse with water. Do not rub eye. Remove any contact lenses and open eyelids wide apart. Get medical attention if any discomfort continues.
<b>Protection of first aiders</b>	First aid personnel should wear appropriate protective equipment during any rescue.

##### 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>	A single exposure may cause the following adverse effects: Headache. Nausea, vomiting. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Narcotic effect.
<b>Ingestion</b>	Due to the physical nature of this product, it is unlikely that ingestion will occur.
<b>Skin contact</b>	Repeated exposure may cause skin dryness or cracking.
<b>Eye contact</b>	Irritating to eyes.

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

<b>Notes for the doctor</b>	Treat symptomatically.
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#### 5. Fire-fighting measures

##### Extinguishing media

<b>Suitable extinguishing media</b>	The product is flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.

##### Specific hazards arising from the hazardous product

<b>Specific hazards</b>	Containers can burst violently or explode when heated, due to excessive pressure build-up. Bursting aerosol containers may be propelled from a fire at high speed. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. Vapours may form explosive mixtures with air.
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## BAC IPA-BASED FLUX REMOVER- ISOCLEAN, AEROSOL

<b>Hazardous combustion products</b>	Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.
<b>Advice for firefighters</b>	
<b>Protective actions during firefighting</b>	Avoid breathing fire gases or vapours. Evacuate area. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Ventilate closed spaces before entering them. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.
<b>Special protective equipment for firefighters</b>	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing that provides a basic level of protection during chemical incidents is defined by the Canada Occupational Health and Safety Regulations, by provincial guidelines on occupational health and safety or by NFPA standards if applicable.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material. Evacuate area. Risk of explosion. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Promptly remove any clothing that becomes contaminated.

#### Environmental precautions

**Environmental precautions** Avoid discharge into drains or watercourses or onto the ground.

#### Methods and material for containment and cleaning up

**Methods for cleaning up** Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Eliminate all ignition sources if safe to do so. No smoking, sparks, flames or other sources of ignition near spillage. Under normal conditions of handling and storage, spillages from aerosol containers are unlikely. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. Small Spillages: Wipe up with an absorbent cloth and dispose of waste safely. Large Spillages: If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. For waste disposal, see Section 13.

#### Reference to other sections

**Reference to other sections** For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

### 7. Handling and storage

#### Precautions for safe handling

## BAC IPA-BASED FLUX REMOVER- ISOCLEAN, AEROSOL

<b>Usage precautions</b>	Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Avoid exposing aerosol containers to high temperatures or direct sunlight. The product is flammable. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Spray will evaporate and cool rapidly and may cause frostbite or cold burns if in contact with skin. Avoid contact with eyes. Avoid inhalation of vapours and spray/mists.
<b>Advice on general occupational hygiene</b>	Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse.
<b><u>Conditions for safe storage, including any incompatibilities</u></b>	
<b>Storage precautions</b>	Store away from incompatible materials (see Section 10). Keep away from oxidizing materials, heat and flames. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Protect from sunlight. Do not store near heat sources or expose to high temperatures. Do not expose to temperatures exceeding 50°C/122°F.
<b>Storage class</b>	Chemical storage.
<b><u>Specific end use(s)</u></b>	
<b>Specific end use(s)</b>	The identified uses for this product are detailed in Section 1.

### 8. Exposure controls/Personal protection

#### Control parameters

#### Occupational exposure limits

##### PROPAN-2-OL

Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 492 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): ACGIH 400 ppm 984 mg/m<sup>3</sup>

A4

##### HFC-134a Tetrafluoroethane

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

ACGIH = American Conference of Governmental Industrial Hygienists.

A4 = Not Classifiable as a Human Carcinogen.

#### Exposure controls

##### Protective equipment



##### Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Ensure the ventilation system is regularly maintained and tested. Good general ventilation should be adequate to control worker exposure to airborne contaminants. Observe any occupational exposure limits for the product or ingredients.

##### Eye/face protection

Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

##### Hand protection

No specific hand protection recommended.

##### Other skin and body protection

Wear appropriate clothing to prevent repeated or prolonged skin contact.

## BAC IPA-BASED FLUX REMOVER- ISOCLEAN, AEROSOL

<b>Hygiene measures</b>	Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.
<b>Respiratory protection</b>	Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.7), and any relevant provincial regulation relating to health and safety at work. Full face mask respirators with replaceable filter cartridges should comply with the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.7), and any relevant provincial regulation relating to health and safety at work. Half mask and quarter mask respirators with replaceable filter cartridges should comply with the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.7), and any relevant provincial regulation relating to health and safety at work.
<b>Environmental exposure controls</b>	Keep container tightly sealed when not in use.

### 9. Physical and chemical properties

#### Information on basic physical and chemical properties

<b>Appearance</b>	Clear liquid.
<b>Colour</b>	Colourless.
<b>Odour</b>	Characteristic. Alcoholic.
<b>Odour threshold</b>	Not determined.
<b>Melting point</b>	Not applicable.
<b>Initial boiling point and range</b>	82 - 83°C/173 - 174°F @ 101.3 kPa
<b>Flash point</b>	12°C/54°F Method: Tag closed cup.
<b>Upper/lower flammability or explosive limits</b>	Upper flammable/explosive limit: 12.0 %(V) Lower flammable/explosive limit: 2.0 %(V)
<b>Vapour pressure</b>	41 hPa @ 20°C
<b>Vapour density</b>	1.82
<b>Bulk density</b>	0.785 g/cm <sup>3</sup>
<b>Solubility(ies)</b>	Soluble in water.
<b>Auto-ignition temperature</b>	425°C/797°F
<b>Viscosity</b>	2.43 mPa s @ 20°C/70°F
<b>Explosive properties</b>	The product is flammable. Heating may generate flammable vapours.
<b>Global Warming Potential (GWP)</b>	
<b>Volatility</b>	100%
<b>Volatile organic compound</b>	This product contains a maximum VOC content of 785 g/litre.

### 10. Stability and reactivity

<b>Reactivity</b>	See the other subsections of this section for further details.
<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

## BAC IPA-BASED FLUX REMOVER- ISOCLEAN, AEROSOL

<b>Possibility of hazardous reactions</b>	The following materials may react strongly with the product: Oxidizing agents.
<b>Conditions to avoid</b>	Avoid exposing aerosol containers to high temperatures or direct sunlight. Pressurized container: may burst if heated
<b>Materials to avoid</b>	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
<b>Hazardous decomposition products</b>	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

### 11. Toxicological information

#### Information on toxicological effects

##### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** Based on available data the classification criteria are not met.

##### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** Based on available data the classification criteria are not met.

##### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** Based on available data the classification criteria are not met.

##### Skin corrosion/irritation

**Animal data** Based on available data the classification criteria are not met.

##### Serious eye damage/irritation

**Serious eye damage/irritation** Causes serious eye irritation.

##### Respiratory sensitization

**Respiratory sensitization** Based on available data the classification criteria are not met.

##### Skin sensitization

**Skin sensitization** Based on available data the classification criteria are not met.

##### Germ cell mutagenicity

**Genotoxicity - in vitro** Based on available data the classification criteria are not met.

##### Carcinogenicity

**Carcinogenicity** Based on available data the classification criteria are not met.

##### IARC carcinogenicity

Contains a substance which may be potentially carcinogenic. IARC Group 3 Not classifiable as to its carcinogenicity to humans.

##### Reproductive toxicity

**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

**Reproductive toxicity - development**

Based on available data the classification criteria are not met.

##### Specific target organ toxicity - single exposure

**STOT - single exposure** STOT SE 3 - H336 May cause drowsiness or dizziness.

**Target organs**

Central nervous system

##### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure.

## BAC IPA-BASED FLUX REMOVER- ISOCLEAN, AEROSOL

### Aspiration hazard

**Aspiration hazard** Based on available data the classification criteria are not met.

### **General information**

The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

### **Inhalation**

A single exposure may cause the following adverse effects: Headache. Nausea, vomiting. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Narcotic effect.

### **Ingestion**

Due to the physical nature of this product, it is unlikely that ingestion will occur.

### **Skin contact**

Repeated exposure may cause skin dryness or cracking.

### **Eye contact**

Irritating to eyes.

### **Route of exposure**

Ingestion Inhalation Skin and/or eye contact

### **Target organs**

Central nervous system

### Toxicological information on ingredients

#### PROPAN-2-OL

##### Carcinogenicity

**IARC carcinogenicity** IARC Group 3 Not classifiable as to its carcinogenicity to humans.

**NTP carcinogenicity** Not listed.

#### HFC-134a Tetrafluoroethane

**Other health effects** There is no evidence that the product can cause cancer.

##### Acute toxicity - inhalation

**Acute toxicity inhalation (LC<sub>50</sub> gases ppmV)** 567,000.0

**Species** Rat

**ATE inhalation (gases ppmV)** 567,000.0

### **Inhalation**

Vapours irritate the respiratory system. May cause coughing and difficulties in breathing.

### **Ingestion**

May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.

### **Skin contact**

May cause allergic contact eczema. Contact with liquid form may cause frostbite.

### **Eye contact**

May cause temporary eye irritation.

## 12. Ecological information

### **Ecotoxicity**

Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

### **Toxicity**

Based on available data the classification criteria are not met.

### Ecological information on ingredients



## BAC IPA-BASED FLUX REMOVER- ISOCLEAN, AEROSOL

### PROPAN-2-OL

#### Acute aquatic toxicity

<b>Acute toxicity - fish</b>	LC <sub>50</sub> , 96 hours: 9,640 mg/l, Fish
<b>Acute toxicity - aquatic invertebrates</b>	EC <sub>50</sub> , 48 hours: 5102 mg/l, Daphnia magna
<b>Acute toxicity - aquatic plants</b>	IC <sub>50</sub> , 72 hours: >2,000 mg/l, Algae

### HFC-134a Tetrafluoroethane

#### Acute aquatic toxicity

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

#### Persistence and degradability

**Persistence and degradability** The degradability of the product is not known.

#### Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

#### Ecological information on ingredients

### PROPAN-2-OL

**Partition coefficient** : 0.05

### HFC-134a Tetrafluoroethane

**Partition coefficient** Pow: 1.06

#### Mobility in soil

**Mobility** The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

#### Other adverse effects

**Other adverse effects** None known.

### 13. Disposal considerations

#### Waste treatment methods

##### **General information**

The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

##### **Disposal methods**

Do not empty into drains. Empty containers must not be punctured or incinerated because of the risk of an explosion. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labeled with their contents.

## BAC IPA-BASED FLUX REMOVER- ISOCLEAN, AEROSOL

### 14. Transport information

**DOT transport notes** As supplied, this product is consigned under the Limited Quantities provisions.

#### UN number

**UN No. (IMDG)** 1950

**UN No. (ICAO)** 1950

#### UN proper shipping name

**Proper shipping name (TDG)** 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)** LIMITED QUANTITY

#### Packing group

**Packing group (International)** Not applicable.

#### Environmental hazards

**Environmentally hazardous substance/marine pollutant**

No.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable. No information required.

### 15. Regulatory information

#### Inventories

**Canada – DSL/NDSL**

All the ingredients are listed or exempt.

### 16. Other information

**Classification abbreviations and acronyms** Aerosol = Aerosol  
Eye Irrit. = Eye irritation  
STOT SE = Specific target organ toxicity-single exposure

**Training advice** Only trained personnel should use this material.

**Revision date** 2020-09-02

**Revision** 48

**Supersedes date** 2019-01-24

**SDS number** AEROSOL - BAC

**SDS status** Approved.

**Hazard statements in full** H222 Extremely flammable aerosol.  
H225 Highly flammable liquid and vapour.  
H280 Contains gas under pressure; may explode if heated.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
May displace oxygen and cause rapid suffocation.

## **BAC IPA-BASED FLUX REMOVER- ISOCLEAN, AEROSOL**

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.