



SAFETY DATA SHEET

BAC IPA-BASED FLUX REMOVER- ISOCLEAN, AEROSOL

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

1. Identification

Product identifier

Product name BAC IPA-BASED FLUX REMOVER- ISOCLEAN, AEROSOL
Product number MCC-BAC, MCC-BAC101
Synonyms; trade names "BAC - ISOCLEAN, DEFLUXER"

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 Eye Irrit. 2A - 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. Vapors may form explosive mixtures with air. Aerosol containers can explode when heated, due to excessive pressure build-up.

Label elements

Pictogram



BAC IPA-BASED FLUX REMOVER- ISOCLEAN, AEROSOL

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, 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 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. P312 Call a poison center/ doctor if you feel unwell. P337+P313 If eye irritation persists: 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. 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**

PROPAN-2-OL	60-100%
CAS number: 67-63-0	
Classification Flam. Liq. 2 - H225 Eye Irrit. 2A - H319 STOT SE 3 - H336	
HFC-134a Tetrafluoroethane	10-30%
CAS number: 811-97-2	
Classification 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.
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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.
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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.
Ingestion	Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Rinse mouth thoroughly with water. Give plenty of water to drink. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Skin Contact	Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if irritation persists after washing.
Eye contact	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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Vapors may cause headache, fatigue, dizziness and nausea.
Ingestion	May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.
Skin contact	Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.
Eye contact	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

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

Extinguishing media

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

Special hazards arising from the substance or mixture

Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up. Vapors are heavier than air and may travel along the floor and accumulate in the bottom of containers. Vapors may be ignited by a spark, a hot surface or an ember.
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. Oxides of carbon.

Advice for firefighters

Protective actions during firefighting	Containers close to fire should be removed or cooled with water. Use water to keep fire exposed containers cool and disperse vapors.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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Personal precautions 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. Follow precautions for safe handling described in this safety data sheet. For personal protection, see Section 8.

Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground.

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. Keep away from heat, sparks and open flame. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapors. 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. Keep containers upright.

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

PROPAN-2-OL

Long-term exposure limit (8-hour TWA): OSHA 400 ppm 980 mg/m³

Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 492 mg/m³

Short-term exposure limit (15-minute): ACGIH 400 ppm 984 mg/m³

A4

HFC-134a Tetrafluoroethane

Long-term exposure limit (8-hour TWA): OES 4240 mg/m³

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

OSHA = Occupational Safety and Health Administration.

ACGIH = American Conference of Governmental Industrial Hygienists.

A4 = Not Classifiable as a Human Carcinogen.

Additional Occupational Exposure Limits

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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.

Hygiene measures

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.

Respiratory protection

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

Appearance	Clear liquid.
Color	Colorless.
Odor	Characteristic. Alcoholic.
Odor threshold	Not determined.
pH	No information available.
Melting point	Not applicable.
Initial boiling point and range	82 - 83°C/173 - 174°F @ 101.3 kPa
Flash point	12°C / 54°F Method: TCC (Tag closed cup).
Evaporation rate	No information available.
Evaporation factor	No information available.
Upper/lower flammability or explosive limits	Upper flammable/explosive limit: 12.0 %(V) Lower flammable/explosive limit: 2.0 %(V)
Other flammability	No information available.
Vapor pressure	41 hPa @ 20°C
Vapor density	1.82
Relative density	No information available.
Bulk density	0.785 g/cm ³

BAC IPA-BASED FLUX REMOVER- ISOCLEAN, AEROSOL

Solubility(ies)	Soluble in water.
Partition coefficient	No information available.
Auto-ignition temperature	425°C/797°F
Decomposition Temperature	No information available.
Viscosity	2.43 mPa s @ 20°C/70°F
Explosive properties	The product is flammable. Heating may generate flammable vapors.
Comments	Aerosol.
Refractive index	No information available.
Particle size	No information available.
Molecular weight	Not applicable.
Volatility	100%
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	This product contains a maximum VOC content of 785 g/litre.
Flammability	Flammable aerosol.

10. Stability and reactivity

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

11. Toxicological information

Information on toxicological effects

Other health effects	There is no evidence that the product can cause cancer.
General information	No specific health hazards known.
Inhalation	May cause respiratory system irritation. Vapors may cause headache, fatigue, dizziness and nausea. Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	May cause stomach pain or vomiting.
Skin Contact	Product has a defatting effect on skin. May cause skin irritation/eczema.
Eye contact	Irritating to eyes.

Toxicological information on ingredients.

BAC IPA-BASED FLUX REMOVER- ISOCLEAN, AEROSOL**PROPAN-2-OL****Acute toxicity - oral**

Acute toxicity oral (LD₅₀ mg/kg) 5,800.0

Species Rat

ATE oral (mg/kg) 5,800.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 13,000.0

Species Rabbit

ATE dermal (mg/kg) 13,000.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 16,000.0

Species Rat

ATE inhalation (vapours mg/l) 16,000.0

Carcinogenicity

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

NTP carcinogenicity Not listed.

OSHA 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 (LC₅₀ gases ppmV) 567,000.0

Species Rat

ATE inhalation (gases ppm) 567,000.0

12. Ecological Information

Ecotoxicity The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential.

Toxicity**Ecological information on ingredients.****PROPAN-2-OL**

Acute toxicity - fish LC₅₀, 96 hours: 9,640 mg/l, Fish

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Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 5102 mg/l, Daphnia magna

Acute toxicity - aquatic plants IC₅₀, 72 hours: >2,000 mg/l, Algae

HFC-134a Tetrafluoroethane

Acute toxicity - fish LC₅₀, 96 hours: 450 mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 980 mg/l, Daphnia magna

Persistence and degradability

Persistence and degradability The product is readily biodegradable.

Bioaccumulative potential

Bio-Accumulative Potential The product does not contain any substances expected to be bioaccumulating.

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.

Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Other adverse effects

Other adverse effects None known.

13. Disposal considerations

Waste treatment methods

General information Reuse or recycle products wherever possible.

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

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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

Not applicable.

IMDG packing group N/A

ICAO packing group N/A

Environmental hazards

Environmentally Hazardous Substance

No.

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. No information required.

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.

BAC IPA-BASED FLUX REMOVER- ISOCLEAN, AEROSOL

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)

PROPAN-2-OL

Present.

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

Not listed.

California Directors List of Hazardous Substances

PROPAN-2-OL

Present.

Massachusetts "Right To Know" List

PROPAN-2-OL

Present.

Rhode Island "Right To Know" List

PROPAN-2-OL

Present.

Minnesota "Right To Know" List

HFC-134a Tetrafluoroethane

Present.

PROPAN-2-OL

Present.

New Jersey "Right To Know" List

PROPAN-2-OL

Present.

Pennsylvania "Right To Know" List

PROPAN-2-OL

Present.

Inventories

Canada - DSL/NDSL

Yes

US - TSCA

All the ingredients are listed.

BAC IPA-BASED FLUX REMOVER- ISOCLEAN, AEROSOL**Australia - AICS***PROPAN-2-OL*

Yes

Korea - KECI*PROPAN-2-OL*

Yes

China - IECSC*PROPAN-2-OL*

Yes

Philippines - PICCS*PROPAN-2-OL*

Yes

16. Other information

Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	2/22/2016
Revision	27
Supersedes date	2/22/2016
SDS No.	AEROSOL - BAC
SDS status	Approved.
Hazard statements in full	H222 Extremely flammable aerosol. H225 Highly flammable liquid and vapor. H280 Contains gas under pressure; may explode if heated. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
NFPA - health hazard	Irritation, minor residual injury. (1)
NFPA - flammability hazard	Ignites easily. (3)
NFPA - instability hazard	Unstable if heated. (1)
NFPA - special hazard	N/A
ACA HMIS Health rating.	Slight Hazard. (1)
ACA HMIS Flammability rating.	Ignites easily. (3)
ACA HMIS Physical hazard rating.	Unstable if heated. (1)
ACA HMIS Personal protection rating.	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.