



SAFETY DATA SHEET

IPA-BASED FLUX REMOVER-ISOCLEAN, BULK

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

1. Identification

Product identifier

Product name IPA-BASED FLUX REMOVER-ISOCLEAN, BULK

Product number MCC-BACG, MCC-BACP, MCC-BACD, MCC-BACL, MCC-BACGL, MCC-BACGG, MCC-BACJG, MCC-BACGI

Synonyms; trade names BACG, BACP, BACD, 4722, 4724, 4725, BAC-ISOPROPYL ALCOHOL, BULK

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: + 1 800 638 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(s) identification

Classification of the substance or mixture

OSHA Regulatory Status This Product is Hazardous under the OSHA Hazard Communication Standard.

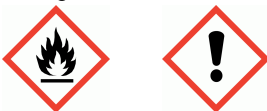
Physical hazards Flam. Liq. 2 - H225

Health hazards Eye Irrit. 2A - H319 STOT SE 3 - H336

Physicochemical The product is highly flammable. Vapors may form explosive mixtures with air.

Label elements

Pictogram



Signal word Danger

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| | |
|---------------------------------------|---|
| Hazard statements | H225 Highly flammable liquid and vapor. 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. P240 Ground/ bond container and receiving equipment. P241 Use explosion-proof electrical equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P261 Avoid breathing vapor/ spray. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P302+P352 If on skin: Wash with plenty of water. 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. P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish. 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 | |

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 |
|-----------------------------|--|

Composition

4. First-aid measures

Description of first aid measures

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| General information | The product is flammable. CAUTION! First aid personnel must be aware of own risk during rescue! Move affected person to fresh air at once. Place unconscious person on the side in the recovery position and ensure breathing can take place. 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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| Ingestion | 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. |
| Skin Contact | Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues. |
| Eye contact | Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues. |

Most important symptoms and effects, both acute and delayed

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|----------------------------|---|
| General information | The severity of the symptoms described will vary dependent on the concentration and the length of exposure. |
| Inhalation | Vapours may cause drowsiness and dizziness. Headache. Irritation of nose, throat and airway. |
| Ingestion | Ingestion of large amounts may cause unconsciousness. May cause nausea, headache, dizziness and intoxication. |
| Skin contact | Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. May cause skin irritation/eczema. |
| Eye contact | May cause temporary eye irritation. Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain. |

Indication of immediate medical attention and special treatment needed

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

Extinguishing media

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| 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

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| Specific hazards | The product is flammable. Heating may generate flammable vapors. Vapors are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. |
| Hazardous combustion products | Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. Oxides of carbon. |
| <u>Advice for firefighters</u> | |
| 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 | Use protective equipment appropriate for surrounding materials. |

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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Personal precautions Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation.

Environmental precautions

Environmental precautions Avoid release to the environment. Do not discharge into drains or watercourses or onto the ground. Contain spillage with sand, earth or other suitable non-combustible material.

Methods and material for containment and cleaning up

Methods for cleaning up Warn everybody of potential hazards and evacuate if necessary. If leakage cannot be stopped, evacuate area. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable waste disposal containers and seal securely.

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. Storage tanks and other containers must be grounded. Static electricity and formation of sparks must be prevented. Ground and bond containers when transferring material.

Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container. Keep container dry. Ground container and transfer equipment to eliminate sparks from static electricity. Do not store near heat sources or expose to high temperatures.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.

Usage description 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

OSHA = Occupational Safety and Health Administration.

ACGIH = American Conference of Governmental Industrial Hygienists.

A4 = Not Classifiable as a Human Carcinogen.

Additional Occupational Exposure Limits

Ingredient comments WEL = Workplace Exposure Limits

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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). It should be noted that liquid may penetrate the gloves. Frequent changes are recommended.

Other skin and body protection

Not considered to be a significant hazard due to the small quantities used. Wear apron or protective clothing in case of contact.

Hygiene measures

Do not smoke in work area. Wash 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

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| Appearance | Clear liquid. |
| Color | Colorless. |
| Odor | Characteristic. Alcoholic. |
| Odor threshold | No information available. |
| pH | Not applicable. |
| Melting point | Not relevant. |
| Initial boiling point and range | 82 - 83°C/179 - 182°F @ 101.3 kPa |
| Flash point | 12°C/54°F TCC (Tag closed cup). |
| Evaporation rate | 2 (butyl acetate = 1) |
| Evaporation factor | No information available. |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or explosive limits | Lower flammable/explosive limit: 2.0 Upper flammable/explosive limit: 12.0 |
| Vapor pressure | 41 hPa @ 20°C |
| Vapor density | 1.82 |
| Relative density | 0.785 g/cm ³ @ 20°C |
| Bulk density | Not applicable. |

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|----------------------------------|---|
| Solubility(ies) | Completely soluble in water. |
| Partition coefficient | No information available. |
| Auto-ignition temperature | 399°C/750.2°F |
| Decomposition Temperature | No information available. |
| Viscosity | 2.43 mPa s @ 20°C |
| Refractive index | No information available. |
| Particle size | Not applicable. |
| Molecular weight | No information available. |
| 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. |

10. Stability and reactivity

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| Reactivity | There are no known reactivity hazards associated with this product. |
| Stability | Stable at normal ambient temperatures. |
| Possibility of hazardous reactions | Will not polymerize. |
| Conditions to avoid | Avoid heat, flames and other sources of ignition. Avoid contact with the following materials: Strong oxidizing agents. Strong alkalis. Strong mineral acids. |
| Materials to avoid | Strong oxidizing agents. |
| Hazardous decomposition products | Fire creates: Vapors/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO ₂). |

11. Toxicological information

Information on toxicological effects

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|--|---|
| Other health effects | There is no evidence that the product can cause cancer. |
| <u>Acute toxicity - oral</u> | |
| Acute toxicity oral (LD₅₀ mg/kg) | 5,050.0 |
| Species | Rat |
| <u>Acute toxicity - dermal</u> | |
| Acute toxicity dermal (LD₅₀ mg/kg) | 12,800.0 |
| Species | Rabbit |
| Inhalation | May cause respiratory system irritation. Vapors may cause headache, fatigue, dizziness and nausea. Prolonged inhalation of high concentrations may damage respiratory system. |

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| | |
|---|---|
| Ingestion | Substance may be harmful if swallowed. May cause nausea, headache, dizziness and intoxication. May cause irritation. Symptoms following overexposure may include the following: Stomach pain. Nausea, vomiting. Diarrhea. |
| Skin Contact | Product has a defatting effect on skin. May cause skin irritation/eczema. |
| Eye contact | Irritating to eyes. Liquid, aerosols and vapors of this product are irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes. |
| Acute and chronic health hazards | Keep out of the reach of children. |

Toxicological information on ingredients.

PROPAN-2-OL

Acute toxicity - inhalation

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

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.

12. Ecological Information

Ecological information on ingredients.

PROPAN-2-OL

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

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

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

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.

PROPAN-2-OL

Partition coefficient : 0.05

Mobility in soil

Mobility The product is soluble in water.

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Other adverse effects

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

13. Disposal considerations

Waste treatment methods

General information Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Waste is suitable for incineration. When handling waste, the safety precautions applying to handling of the product should be considered.

Disposal methods 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) | 1219 |
| UN No. (IMDG) | 1219 |
| UN No. (ICAO) | 1219 |
| UN No. (DOT) | UN1219 |

UN proper shipping name

| | |
|-----------------------------|---------------------------------|
| Proper shipping name (TDG) | ISOPROPANOL (ISOPROPYL ALCOHOL) |
| Proper shipping name (IMDG) | ISOPROPANOL (ISOPROPYL ALCOHOL) |
| Proper shipping name (ICAO) | ISOPROPANOL (ISOPROPYL ALCOHOL) |
| Proper shipping name (DOT) | ISOPROPYL ALCOHOL |

Transport hazard class(es)

| | |
|---------------------|---|
| DOT hazard class | 3 |
| DOT hazard label | 3 |
| TDG class | 3 |
| TDG label(s) | 3 |
| IMDG Class | 3 |
| ICAO class/division | 3 |

Transport labels



DOT transport labels



Packing group

| | |
|-------------------|----|
| TDG Packing Group | II |
|-------------------|----|

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IMDG packing group II

ICAO packing group II

DOT packing group II

Environmental hazards

Environmentally Hazardous Substance

No.

Special precautions for user

EmS F-E, S-D

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78
and the IBC Code

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

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

IPA-BASED FLUX REMOVER-ISOCLEAN, BULK*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*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

Yes

16. Other information

| | |
|----------------------------------|---|
| Revision comments | NOTE: Lines within the margin indicate significant changes from the previous revision. |
| Revision date | 1/24/2018 |
| Revision | 41 |
| Supersedes date | 11/10/2017 |
| SDS No. | BULK - BAC |
| SDS status | Approved. |
| Hazard statements in full | H225 Highly flammable liquid and vapor. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. |

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.