# SAFETY DATA SHEET
# UFR UNIVERSAL FLUX REMOVER, AEROSOL

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

## 1. Identification

### Product identifier

**Product name** UFR UNIVERSAL FLUX REMOVER, AEROSOL

**Product number** MCC-UFR10A, MCC-UFR10Y

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

**Application** Cleaning agent.

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

**Supplier**
MicroCare LLC
Tel: +1 860-827-0626

**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
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 Not Hazardous under the OSHA Hazard Communication Standard.

**Physical hazards** Not Classified

**Health hazards** Repr. 1B - H360

**Environmental hazards** Not Classified

**Human health** Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. Mild dermatitis, allergic skin rash.

**Environmental** The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

**Physicochemical** Vapors are heavier than air and may travel along the floor and accumulate in the bottom of containers. Not considered to be a significant hazard due to the small quantities used. Gas or vapor displaces oxygen available for breathing (asphyxiant).

### Label elements

# UFR UNIVERSAL FLUX REMOVER, AEROSOL

**Hazard symbols**

| | |
|---|---|
| **Signal word** | Danger |
| **Hazard statements** | H360 May damage fertility or the unborn child. |
| **Precautionary statements** | P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.<br>P211 Do not spray on an open flame or other ignition source.<br>P251 Pressurized container: Do not pierce or burn, even after use<br>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.<br>P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C /122°F.<br>P501 Dispose of contents/ container in accordance with local regulations. |
| **Supplemental label information** | EUH210 Safety data sheet available on request. RCH001a For use in industrial installations only. |
| **Contains** | METHANOL |

**Other hazards**

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

## 3. Composition/information on ingredients

**Mixtures**

**trans-1-Chloro-3,3,3-trifluoropropene** **60-100%**

CAS number: 102687-65-0

**Classification**

Press. Gas, Liquefied - H280

**TRANS-1,3,3,3-TETRAFLUOROPROP-1-ENE** **10-30%**

CAS number: 29118-24-9

**Classification**

Press. Gas, Liquefied - H280

**ETHANOL** **1-5%**

CAS number: 64-17-5

**Classification**

Flam. Liq. 2 - H225

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**METHANOL** **<1%**

CAS number: 67-56-1

**Classification**
Flam. Liq. 2 - H225
Acute Tox. 3 - H301
Acute Tox. 3 - H311
Acute Tox. 3 - H331
STOT SE 1 - H370

**ISOBUTYL METHYL KETONE** **<1%**

CAS number: 108-10-1

**Classification**
Flam. Liq. 2 - H225
Acute Tox. 4 - H332
Eye Irrit. 2A - H319
Carc. 2 - H351
STOT SE 3 - H335

**ETHYL ACETATE** **<1%**

CAS number: 141-78-6

**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

**General information** Never give anything by mouth to an unconscious person. Do not induce vomiting. Place unconscious person on the side in the recovery position and ensure breathing can take place. If breathing stops, provide artificial respiration. Consult a physician for specific advice.

**Inhalation** Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention.

**Ingestion** Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. Get medical attention.

**Skin Contact** Remove contaminated clothing and rinse skin thoroughly with water.

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**Eye contact** Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Consult a physician for specific advice.

### 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. Get medical attention promptly if symptoms occur after washing.

**Inhalation** Upper respiratory irritation. Vapors are heavier than air and may travel along the floor and accumulate in the bottom of containers. Gas or vapor displaces oxygen available for breathing (asphyxiant). Prolonged or excessive inhalation may cause respiratory tract irritation.

**Ingestion** May cause stomach pain or vomiting. Diarrhea. May cause nausea, headache, dizziness and intoxication. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.

**Skin contact** Skin irritation. This product is rapidly absorbed through the skin and may cause symptoms similar to those of ingestion.

**Eye contact** Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain. May cause blurred vision and serious eye damage.

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

**Notes for the doctor** No specific recommendations. If in doubt, get medical attention promptly.

## 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

### Special hazards arising from the substance or mixture

**Specific hazards** Keep away from heat, sparks and open flame. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapors. Aerosol containers can explode when heated, due to excessive pressure build-up.

**Hazardous combustion products** Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. Oxides of carbon. Fire or high temperatures create: Carbonyl compounds. Mineral acids.

### Advice for firefighters

**Protective actions during firefighting** Move containers from fire area if it can be done without risk. Bursting aerosol containers may be propelled from a fire at high speed.

**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

**Personal precautions** Warn everybody of potential hazards and evacuate if necessary. Provide adequate ventilation. Avoid inhalation of vapors. Use approved respirator if air contamination is above an acceptable level.

### Environmental precautions

**Environmental precautions** Contain spillage with sand, earth or other suitable non-combustible material. Avoid release to the environment.

### Methods and material for containment and cleaning up

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**Methods for cleaning up** Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses. 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. Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely.

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see section 13.

## 7. Handling and storage

### Precautions for safe handling

**Usage precautions** Provide adequate ventilation. Avoid inhalation of vapors/spray and contact with skin and eyes. Keep away from heat, sparks and open flame. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapors. 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)** The identified uses for this product are detailed in Section 1.

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

## 8. Exposure controls/Personal protection

### Control parameters

### Occupational exposure limits

**trans-1-Chloro-3,3,3-trifluoropropene**

Long-term exposure limit (8-hour TWA): SUP 800 ppm

**ETHANOL**

Short-term exposure limit (15-minute): ACGIH 1000 ppm 1880 mg/m³
A3
Long-term exposure limit (8-hour TWA): OSHA 1000 ppm 1900 mg/m³

**METHANOL**

Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 262 mg/m³
Short-term exposure limit (15-minute): ACGIH 250 ppm 328 mg/m³
Sk
Long-term exposure limit (8-hour TWA): OSHA 200 ppm 260 mg/m³

**ISOBUTYL METHYL KETONE**

Long-term exposure limit (8-hour TWA): ACGIH 20 ppm 82 mg/m³
Short-term exposure limit (15-minute): ACGIH 75 ppm 307 mg/m³
A3
Long-term exposure limit (8-hour TWA): OSHA 100 ppm 410 mg/m³

**ETHYL ACETATE**

Long-term exposure limit (8-hour TWA): ACGIH 400 ppm 1440 mg/m³
Long-term exposure limit (8-hour TWA): OSHA 400 ppm 1400 mg/m³

ACGIH = American Conference of Governmental Industrial Hygienists.
A3 = Confirmed Animal Carcinogen with Unknown Relevance to Humans.
OSHA = Occupational Safety and Health Administration.
Sk = Danger of cutaneous absorption.

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**Ingredient comments** ACGIH = US Standard. SUP = Supplier's recommendation. OES = Occupational Exposure Standard.

**trans-1-Chloro-3,3,3-trifluoropropene (CAS: 102687-65-0)**

**Ingredient comments** No exposure limits known for ingredient(s).

**ETHANOL (CAS: 64-17-5)**

**Ingredient comments** WEL = Workplace Exposure Limits

**METHANOL (CAS: 67-56-1)**

**Biological limit values** 15 mg/l

## Exposure controls

**Protective equipment**

**Appropriate engineering controls** No specific ventilation requirements. This product must not be handled in a confined space without adequate 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 suitable protective clothing as protection against splashing or contamination. Wear apron or protective clothing in case of contact.

**Hygiene measures** No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products. When using do not eat, drink or smoke.

**Respiratory protection** Considering the size of the packaging, the risk is regarded as minimal. Vapors are heavier than air and may travel along the floor and accumulate in the bottom of containers. In confined or poorly-ventilated spaces, a supplied-air respirator must be worn. Wear self-contained breathing apparatus with full facepiece.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

**Appearance** Aerosol. Liquid. Gas

**Color** Clear liquid. Colorless.

**Odor** Slight.

**Odor threshold** No information available.

**pH** Not applicable.

**Melting point** Not applicable.

**Initial boiling point and range** 19°C/66°F @ 101.3 kPa

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| | |
|---|---|
| **Flash point** | Not applicable. The product is not flammable. |
| **Evaporation rate** | Not determined. |
| **Evaporation factor** | No information available. |
| **Upper/lower flammability or explosive limits** | Not applicable. |
| **Other flammability** | No information available. |
| **Vapor pressure** | 1.91 kPa @ 20°C |
| **Vapor density** | >1 |
| **Relative density** | 1.24 |
| **Bulk density** | No information available. |
| **Solubility(ies)** | Slightly soluble in water. |
| **Partition coefficient** | No information available. |
| **Auto-ignition temperature** | No information available. |
| **Decomposition Temperature** | No information available. |
| **Viscosity** | No information available. |
| **Global Warming Potential (GWP)** | |
| **Surface tension** | |
| **Refractive index** | No information available. |
| **Particle size** | No information available. |
| **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 59 g/litre. |
| **Heat of vaporization (at boiling point), cal/g (Btu/lb)** | |

## 10. Stability and reactivity

| | |
|---|---|
| **Reactivity** | There are no known reactivity hazards associated with this product. |
| **Stability** | Stable at normal ambient temperatures and when used as recommended. |
| **Possibility of hazardous reactions** | Will not polymerize. |
| **Conditions to avoid** | Keep away from heat, sparks and open flame. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapors. |
| **Materials to avoid** | Alkali metals. Alkaline earth metals. |

# UFR UNIVERSAL FLUX REMOVER, AEROSOL

| | |
|---|---|
| **Hazardous decomposition products** | Heating may generate the following products: Toxic and corrosive gases or vapors. Halogenated hydrocarbons. Hydrogen fluoride (HF). Carbon dioxide (CO2). Carbon monoxide (CO). |

## 11. Toxicological information

### Information on toxicological effects

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

**Acute toxicity - oral**

| | |
|---|---|
| **ATE oral (mg/kg)** | 50,384.18 |

**Acute toxicity - dermal**

| | |
|---|---|
| **ATE dermal (mg/kg)** | 151,152.54 |

**Acute toxicity - inhalation**

| | |
|---|---|
| **ATE inhalation (vapours mg/l)** | 1,511.53 |
| **ATE inhalation (dusts/mists mg/l)** | 251.92 |

| | |
|---|---|
| **Inhalation** | Vapors may irritate throat/respiratory system. A single exposure may cause the following adverse effects: Coughing. Difficulty in breathing. |
| **Ingestion** | May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication. |
| **Skin Contact** | Product has a defatting effect on skin. May cause allergic contact eczema. |
| **Eye contact** | May cause temporary eye irritation. |
| **Medical Symptoms** | Gas or vapor in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Headache. Fatigue. Nausea, vomiting. |

### Toxicological information on ingredients.

**trans-1-Chloro-3,3,3-trifluoropropene**

**Acute toxicity - oral**

| | |
|---|---|
| **Notes (oral $LD_{50}$)** | No information available. |

**Acute toxicity - dermal**

| | |
|---|---|
| **Notes (dermal $LD_{50}$)** | No information required. |

**Acute toxicity - inhalation**

| | |
|---|---|
| **Acute toxicity inhalation ($LC_{50}$ gases ppmV)** | 120,000.0 |
| **Species** | Rat |
| **ATE inhalation (gases ppm)** | 120,000.0 |

| | |
|---|---|
| **Inhalation** | Vapors may irritate throat/respiratory system. A single exposure may cause the following adverse effects: Coughing. Difficulty in breathing. |
| **Ingestion** | May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication. |

# UFR UNIVERSAL FLUX REMOVER, AEROSOL

| | |
|---|---|
| **Skin Contact** | Product has a defatting effect on skin. May cause allergic contact eczema. |
| **Eye contact** | May cause temporary eye irritation. |
| **Medical Symptoms** | Gas or vapor in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Headache. Fatigue. Nausea, vomiting. |

## TRANS-1,3,3,3-TETRAFLUOROPROP-1-ENE

**Acute toxicity - inhalation**

| | |
|---|---|
| **Acute toxicity inhalation ($LC_{50}$ vapours mg/l)** | 207,000.0 |
| **Species** | Rat |
| **ATE inhalation (vapours mg/l)** | 207,000.0 |

## ETHANOL

**Acute toxicity - inhalation**

| | |
|---|---|
| **Acute toxicity inhalation ($LC_{50}$ vapours mg/l)** | 20,000.0 |
| **ATE inhalation (vapours mg/l)** | 20,000.0 |

## METHANOL

**Acute toxicity - oral**

| | |
|---|---|
| **Notes (oral $LD_{50}$)** | Acute Tox. 3 - H301 Toxic if swallowed. |
| **ATE oral (mg/kg)** | 100.0 |

**Acute toxicity - dermal**

| | |
|---|---|
| **Notes (dermal $LD_{50}$)** | Acute Tox. 3 - H311 Toxic in contact with skin. |
| **ATE dermal (mg/kg)** | 300.0 |

**Acute toxicity - inhalation**

| | |
|---|---|
| **Notes (inhalation $LC_{50}$)** | Acute Tox. 3 - H331 Toxic if inhaled. |
| **ATE inhalation (vapours mg/l)** | 3.0 |
| **ATE inhalation (dusts/mists mg/l)** | 0.5 |

**Skin corrosion/irritation**

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

**Serious eye damage/irritation**

| | |
|---|---|
| **Serious eye damage/irritation** | Based on available data the classification criteria are not met. |

**Respiratory sensitization**

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

# UFR UNIVERSAL FLUX REMOVER, AEROSOL

**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** | None of the ingredients are listed or exempt. |

**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 1 - H370 Causes damage to organs . |

**Specific target organ toxicity - repeated exposure**

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

**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: Drowsiness, dizziness, disorientation, vertigo. Unconsciousness. High concentrations may be fatal. |
| **Ingestion** | May cause stomach pain or vomiting. May cause severe internal injury. |
| **Skin Contact** | A single exposure may cause the following adverse effects: Pain. |
| **Eye contact** | No specific symptoms known. |
| **Route of exposure** | Ingestion Inhalation Skin and/or eye contact |
| **Target Organs** | No specific target organs known. |

**ISOBUTYL METHYL KETONE**

**Acute toxicity - inhalation**

| | |
|---|---|
| **ATE inhalation (vapours mg/l)** | 11.0 |
| **ATE inhalation (dusts/mists mg/l)** | 1.5 |

**Carcinogenicity**

| | |
|---|---|
| **IARC carcinogenicity** | IARC Group 2B Possibly carcinogenic to humans. |

## 12. Ecological information

| | |
|---|---|
| **Ecotoxicity** | There are no data on the ecotoxicity of this product. |

# UFR UNIVERSAL FLUX REMOVER, AEROSOL

## Ecological information on ingredients.

### trans-1-Chloro-3,3,3-trifluoropropene

**Ecotoxicity** The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

### METHANOL

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

## Ecological information on ingredients.

### trans-1-Chloro-3,3,3-trifluoropropene

**Acute aquatic toxicity**

**Acute toxicity - fish** , : , Oncorhynchus mykiss (Rainbow trout)
$LC_{50}$, 96 hours: 38 mg/l mg/l, Fish

**Acute toxicity - aquatic invertebrates** $EC_{50}$, 48 hours: 82 mg/l, Freshwater invertebrates

**Acute toxicity - aquatic plants** $EC_{50}$, 72 hours: 106.7 mg/l, Freshwater algae
NOEC, 72 hours: 115 mg/l, Freshwater algae

### TRANS-1,3,3,3-TETRAFLUOROPROP-1-ENE

**Acute aquatic toxicity**

**Acute toxicity - aquatic invertebrates** $EC_{50}$, 48 hours: >160 mg/l, Daphnia magna

### ETHANOL

**Acute aquatic toxicity**

**Acute toxicity - fish** $LC_{50}$, 96 hours: >10,000 mg/l, Fish

**Acute toxicity - aquatic invertebrates** $EC_{50}$, 48 hours: 7,800 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** , 96 hours: 1000 mg/l, Freshwater algae

### METHANOL

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

**Acute aquatic toxicity**

**Acute toxicity - fish** $LC_{50}$, 96 hours: >100 mg/l, Pimephales promelas (Fat-head Minnow)

**Acute toxicity - aquatic invertebrates** $EC_{50}$, 48 hours: >10000 mg/l, Daphnia magna

## Persistence and degradability

**Persistence and degradability** There are no data on the degradability of this product.

## Ecological information on ingredients.

### trans-1-Chloro-3,3,3-trifluoropropene

# UFR UNIVERSAL FLUX REMOVER, AEROSOL

**Persistence and degradability** The product is not readily biodegradable.

**TRANS-1,3,3,3-TETRAFLUOROPROP-1-ENE**

**Persistence and degradability** The product is not readily biodegradable.

**ETHANOL**

**Persistence and degradability** The product is expected to be biodegradable.

**METHANOL**

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

**Bioaccumulative potential**

**Bio-Accumulative Potential** No data available on bioaccumulation.

**Partition coefficient** No information available.

**Ecological information on ingredients.**

**trans-1-Chloro-3,3,3-trifluoropropene**

**Bio-Accumulative Potential** No data available on bioaccumulation.

**Partition coefficient** Kow: 2.09

**ETHANOL**

**Bio-Accumulative Potential** Bioaccumulation is unlikely.

**Partition coefficient** No information available.

**METHANOL**

**Bio-Accumulative Potential** No data available on bioaccumulation.

**Partition coefficient** : -0.77

**Mobility in soil**

**Mobility** The product contains volatile substances which may spread in the atmosphere.

**Ecological information on ingredients.**

**trans-1-Chloro-3,3,3-trifluoropropene**

**Mobility** No data available.

**ETHANOL**

**Mobility** The product is soluble in water.

**METHANOL**

# UFR UNIVERSAL FLUX REMOVER, AEROSOL

**Mobility** No data available.

**Other adverse effects**

**Other adverse effects** The product contains a substance which has a photochemical ozone creation potential.

**Ecological information on ingredients.**

**trans-1-Chloro-3,3,3-trifluoropropene**

**Other adverse effects** None known.

**METHANOL**

**Other adverse effects** None known.

## 13. Disposal considerations

**Waste treatment methods**

**General information** Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Empty containers must not be punctured or incinerated because of the risk of an explosion. Aerosol containers can explode when heated, due to excessive pressure build-up. Reuse or recycle products wherever possible.

## 14. Transport information

**UN Number**

**UN No. (TDG)** 1950

**UN No. (IMDG)** 1950

**UN No. (ICAO)** 1950

**UN No. (DOT)** UN1950

**UN proper shipping name**

**Proper shipping name (TDG)** AEROSOLS

**Proper shipping name (IMDG)** AEROSOLS

**Proper shipping name (ICAO)** AEROSOLS

**Proper shipping name (DOT)** AEROSOLS

**Transport hazard class(es)**

**DOT hazard class** 2.2

**DOT hazard label** 2.2

**TDG class** 2.2

**TDG label(s)** 2.2

**IMDG Class** 2.2

**ICAO class/division** 2.2

# UFR UNIVERSAL FLUX REMOVER, AEROSOL

**Transport labels**


**DOT transport labels**


## Packing group

| | |
|---|---|
| **TDG Packing Group** | None |
| **IMDG packing group** | None |
| **ICAO packing group** | None |
| **DOT packing group** | None |

## 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. |

## 15. Regulatory information

**Guidance**
Workplace Exposure Limits EH40.
Introduction to Local Exhaust Ventilation HS(G)37.

## 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
Pressure

# UFR UNIVERSAL FLUX REMOVER, AEROSOL

**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**

*ETHANOL*
Present.

**Massachusetts "Right To Know" List**

*ETHANOL*
Present.

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

*ETHANOL*
Present.

**Minnesota "Right To Know" List**

*ETHANOL*
Present.

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

*ETHANOL*
Present.

**Pennsylvania "Right To Know" List**

*ETHANOL*
Present.

## Inventories

**Canada - DSL/NDSL**

*ETHANOL*
DSL

*TRANS-1,3,3,3-TETRAFLUOROPROP-1-ENE*
DSL

*trans-1-Chloro-3,3,3-trifluoropropene*
DSL

**US - TSCA**
Yes

*ETHANOL*
Present.

# UFR UNIVERSAL FLUX REMOVER, AEROSOL

*TRANS-1,3,3,3-TETRAFLUOROPROP-1-ENE*
Present.

*trans-1-Chloro-3,3,3-trifluoropropene*
Present.

## 16. Other information

| | |
|---|---|
| **Revision comments** | NOTE: Lines within the margin indicate significant changes from the previous revision. |
| **Revision date** | 1/12/2021 |
| **Revision** | 41 |
| **Supersedes date** | 1/11/2021 |
| **SDS No.** | AEROSOL - UFR10A |
| **SDS status** | Approved. |
| **Hazard statements in full** | H225 Highly flammable liquid and vapor.<br>H280 Contains gas under pressure; may explode if heated.<br>H301 Toxic if swallowed.<br>H311 Toxic in contact with skin.<br>H319 Causes serious eye irritation.<br>H331 Toxic if inhaled.<br>H332 Harmful if inhaled.<br>H335 May cause respiratory irritation.<br>H336 May cause drowsiness or dizziness.<br>H351 Suspected of causing cancer.<br>H360 May damage fertility or the unborn child.<br>H370 Causes damage to organs . |