



SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : CLR Brands® Drain Opener

Product Use : Clog remover for drains.

Restrictions on Use : Do not use product for anything outside of the above specified uses

Supplier : Jelmar, LLC

5550 W. Touhy Avenue

Skokie, IL 60077

United States of America

Product Information : 1-800-323-5497

INFOTRAC : 1-800-535-5053 (North America)

INFOTRAC : 1-352-323-3500 (International)

SECTION 2. HAZARDS IDENTIFICATION

Product hazard category

WARNING: Flammable Gases – Category 2. Liquefied Gas. Gases Under Pressure: May explode if heated.

Label content



Pictogram :  

Signal word : **WARNING**

Hazard Statements

Flammable Gases – Category 2. Gases Under Pressure: Liquefied gas. May burst if heated.



SAFETY DATA SHEET

Precautionary Statements

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces.
No smoking.
Do not spray on an open flame or other ignition source.
Do not pierce or burn, even after use.
Protect from sunlight.
Do not expose to temperatures exceeding 50C/122F.
Avoid breathing vapor or mist.
Avoid contact with skin and eyes.
Inhalation of mist may cause irritation of the throat and lungs.
Use in a well-ventilated area.
Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.

Other Hazards

Rapid evaporation of the liquid may cause frostbite., Vapors are heavier than air and can cause suffocation by reducing oxygen available for breathing., May cause cardiac arrhythmia., Misuse or intentional inhalation abuse may cause death without warning symptoms, due to cardiac effects.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
1,1-Difluoroethane	75-37-6	100 %

SECTION 4. FIRST AID MEASURES

General advice : In the case of accident or if you feel unwell, seek medical advice immediately.
Never give anything by mouth to an unconscious person. When symptoms persist or in all cases of doubt seek medical advice.

Inhalation : If inhaled, remove to fresh air. Get medical attention if symptoms occur.

Skin contact : Thaw frosted parts with lukewarm water. Do not rub affected area.
Get medical attention immediately.
: Get medical attention immediately.

Eye contact : Is not considered a potential route of exposure.

Ingestion



SAFETY DATA SHEET

Most important	: May cause cardiac arrhythmia. Other symptoms potentially related to symptoms/effects, both acute misuse or inhalation abuse are: cardiac sensitization, anesthetic effects and delayed lightheadedness, dizziness, confusion, lack of coordination, drowsiness unconsciousness, contact with liquid can cause cold burns and frostbite.
Protection of first-aiders	: If potential for exposure exists refer to Section 8 for specific personal protective equipment.
Notes to physician	: Because of possible disturbances of cardiac rhythm, catecholamine drugs, such as epinephrine, that may be used in situations of emergency life support should be used with special caution.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray, water fog, Dry chemical, Alcohol-resistant foam, Carbon dioxide (CO₂)

Unsuitable extinguishing media : No applicable data available.

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Fight fire remotely due to the risk of explosion. Use water spray to cool containers. Unless a gas leak can be stopped safely, do not extinguish. Evacuate area.

Specific hazards: Flammable. Containers may rupture under fire conditions. This substance's fire decomposition by-products will include hydrofluoric acid, and possibly carbonyl fluoride. Avoid contact with these materials, which are toxic and irritating. Evacuate personnel immediately in the event of a fire involving this substance. Vapors may form explosive mixtures with air. Vapors are heavier than air and may spread along floors. Vapors or gases may travel considerable distances to ignition source and flash back.

Special protective equipment for firefighters: Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment. Wear neoprene gloves during cleaning up work after a fire. Exposure to decomposition products may be a hazard to health.

Further information: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Cool containers/tanks with water spray.



SAFETY DATA SHEET

SECTION 6. ACCIDENTAL RELEASE MEASURES

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

- Safeguards (Personnel) : Evacuate personnel to safe areas. Ventilate the area. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Prevent further leakage or spills, if safe to do so. Retain and dispose of contaminated wash water.
- Spill Cleanup : If this product is spilled and not recovered, or is recovered as a waste for treatment or disposal, the CERCLA Reportable Quantity is 100 lbs. (release of an Unlisted Hazardous Waste with the Characteristic of Ignitability).
Evaporates - Ventilate area using forced ventilation, especially low or enclosed places where heavy vapors might collect.

Accidental Release Measures : Wear self-contained breathing apparatus (SCBA).

SECTION 7. HANDLING AND STORAGE

- Handling (Personnel) : Avoid breathing vapors or mist. Avoid contact with skin, eyes and clothing. Provide sufficient air exchange and/or exhaust in work rooms. Handle in accordance with good industrial hygiene and safety practice.
- Handling (Physical Aspects) : Vapors are heavier than air and may spread along floors. Vapors may form flammable mixture with air. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. No sparking tools should be used. Take measures to prevent the buildup of electrostatic charge. Keep away from open flames, hot surfaces and sources of ignition. When using do not smoke.
- Dust explosion class : Not applicable



SAFETY DATA SHEET

Storage : Keep container tightly closed in a dry and well-ventilated place. Store in original container.

Materials to Avoid : Do not store with the following product types: self-reactive organic peroxides, oxidizing agents, flammable liquids, flammable substances and mixtures, solids, pyrophoric liquids, pyrophoric solids, self-heating substances and mixtures, substances and mixtures which in contact with water emit flammable gases, explosives, acute toxic substances and mixtures, substances and mixtures with chronic toxicity.

Storage temperature : < 52 °C (< 126 °F)

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls : Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical equipment rated Class I, Group D in Division 1 locations. In Division 2 locations, all spark-producing electrical equipment must be explosion-proof and rated Class I, Group D. Ground all equipment and cylinders before use.

Personal protective equipment

Respiratory protection : For rescue and maintenance work in storage tanks use self-contained breathing apparatus. Vapors are heavier than air and can cause suffocation by reducing oxygen available for breathing.

Hand protection : Additional protection: Heat insulating gloves, and, Impervious gloves

Eye protection : Wear coverall chemical splash goggles. Additionally, wear a face shield where the possibility exists for face contact due to splashing, spraying or airborne contact with this material.

Skin and body protection : Fire protective clothing (NOMEX) with antistatic control should be worn when handling this product. Wear protective clothing which covers any other exposed areas of the arms, legs, and torso.

Protective measures : When using do not smoke. Self-contained breathing apparatus (SCBA) is required if a large release occurs.

Exposure Guidelines Exposure Limit Values for 1,1-Difluoroethane

~~TWA: 2.5 mg/m³ (United States, 10/2011):~~

~~TWA: 2.5 mg/m³ (United States, 6/2017):~~

OSHA PEL 1989 (United States, 3/1989): TWA: 2.5 mg/m³, (as F) 8 hours.

OSHA PEL Z2 (United States, 2/2013): TWA: 2.5 mg/m³ 8 hours. Form: Dust

OSHA PEL (United States, 6/2016): TWA: 2.5 mg/m³, (as F) 8 hours.



SAFETY DATA SHEET

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	: gas
Form	: compressed gas
Color	: clear, colorless
Odor	: slight, ether-like
Odor threshold	: No applicable data available.
pH	: NA – non-aqueous.
Melting point/range	: -179°F /-117C
Boiling point/boiling range	: Boiling point -25 °C (-13 °F) at 1,013 hPa
Flash point	: No applicable data available.
Evaporation rate	: No applicable data available.
Flammability (solid, gas)	: Flammable
Upper explosion limit	: 16.9 vol%
Lower explosion limit	: 3.9 vol%
Vapor pressure	: 5,960 hPa at 25 °C (77 °F)
Vapor density (Air = 1.0)	: 2.4 at 25 °C (77 °F)
Density	: 0.90 g/cm ³ at 25 °C (77 °F) (as liquid)
Specific gravity (Relative density):	No applicable data available.
Water solubility	: 0.2 g/l at 25 °C (77 °F) at 1,013 hPa
Solubility (ies)	: No applicable data available.
Partition coefficient: n-octanol/water	: log Pow 0.053 25 °C (77 °F)
Auto-ignition temperature	: Not applicable
Ignition temperature	: 824°F / 440 C
Decomposition temperature	: No applicable data available.
Viscosity, kinematic	: No applicable data available.
Viscosity	: No applicable data available.



SAFETY DATA SHEET

% Volatile : 100 %

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable under recommended storage conditions.

Chemical stability : The product is chemically stable.

Possibility of hazardous reactions : Flammable Gas. Can react with strong oxidizers.

Conditions to avoid : Material is stable. Avoid open flames and high temperatures.

Incompatible materials : Incompatible products Alkali metals, Alkaline earth metals, Powdered metals, Powdered metal salts

Hazardous decomposition products : Decomposition products are hazardous., This material can be decomposed by high temperatures (open flames, glowing metal surfaces, etc.) forming hydrofluoric acid and possibly carbonyl fluoride.

SECTION 11. TOXICOLOGICAL INFORMATION

1,1-Difluoroethane

Inhalation 4 h LC50 : > 437500 ppm, Rat

Inhalation No Observed Adverse Effect Concentration : 50000 ppm, Dog
Cardiac sensitization

Inhalation Low Observed Adverse Effect Concentration (LOAEC) : 150000 ppm, Dog
Cardiac sensitization

Skin sensitization : Does not cause respiratory sensitization., Rat

Repeated dose toxicity : Inhalation
Rat
-
NOAEL: 67.485 mg/l
No toxicologically significant effects were found.

Carcinogenicity : Not classifiable as a human carcinogen.
Animal testing did not show any carcinogenic effects.

Mutagenicity : Animal testing did not show any mutagenic effects.
Did not cause genetic damage in cultured bacterial cells.
Tests on mammalian cell cultures showed mutagenic effects.

Reproductive toxicity : No toxicity to reproduction.
Animal testing showed no reproductive toxicity.



SAFETY DATA SHEET

Teratogenicity : Animal testing showed no developmental toxicity.
Further information : Cardiac sensitization threshold limit: 405000 mg/m³

Carcinogenicity : None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity

1,1-Difluoroethane

96 h LC50 96 h EC50 48 h EC50 : Fish 295.78 mg/l

Acute aquatic toxicity : Algae 47.76 mg/l
: Daphnia (water flea) 146.7 mg/l
: Harmful to aquatic life

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods : Comply with applicable Federal, State/Provincial and Local Regulations. May be a RCRA Hazardous waste due to the ignitability characteristic. Do not puncture or incinerate container.

Contaminated packaging : Empty pressure vessels should be taken to an approved waste handling site for disposal.

SECTION 14. TRANSPORT INFORMATION

UN Number : 1030
UN Proper Shipping Name : 1,1-Difluoroethane
DOT Classification : 2.1
Packing Group : N/A

Packaging Exceptions Note: the manufacturer has been granted a DOT special permit. A copy of DOT Special Permit SP-11516 can be obtained on the US DOT website here <https://www.phmsa.dot.gov/hazmat/documents/offer/SP11516.pdf/2018039560/SP11516> or by calling Jelmar at 1-800-323-5497.

Department of Transportation Dangerous Proper Shipping name: 1,1-Difluoroethane



SAFETY DATA SHEET

Hazard Class: 2.1

UN number: 1030

IATA/ICAO (Air)

Proper Shipping Name: 1,1-Difluoroethane.

Hazard Class: 2.1.

UN Number: 1030.

Maximum Net Quantity Packaging: Cargo Aircraft only - 150 kg maximum (forbidden on passenger aircraft).

Maximum Net Quantity packaging cargo only: 150 kg.

IMDG (Marine Transport)

Proper Shipping Name: 1,1-DIFLUOROETHANE.

Hazard Class: 2.1.

UN Number: 1030.

SECTION 15. REGULATORY INFORMATION

TSCA

: On the inventory, or in compliance with the inventory

SARA 313 Regulated Chemical(s)

: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

NJ Right to Know Regulated Chemical(s) : Substances on the New Jersey Workplace Hazardous

Substance List Present at a concentration of 1% or more (0.1% for substances identified as carcinogens, mutagens or teratogens): 1,1-Difluoroethane

Pennsylvania Right to Know : 1-Difluoroethane 75-37-6

California Prop. 65

: Chemicals known to the State of California to cause cancer, birth defects or any other harm: none known.

SECTION 16. OTHER INFORMATION

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and



SAFETY DATA SHEET

may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.