

AIROSOL COMPANY, INC.

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MATERIAL SAFETY DATA SHEET

SECTION 1: IDENTIFICATION

PRODUCT NAME: **CLR Power Plumber**

PRODUCT NUMBER: 88600

CAS NUMBER: See Section 2.

PRODUCT FAMILY:

HMIS: Health 1 Reactivity 0 Flammability 4

NFPA RATING AS AN AEROSOL: Level One Aerosol

Medical Emergency: 1-800-633-9576

INFOTRAC: 1-800-535-5053

SECTION 2: HAZARDOUS COMPONENTS

COMPONENT NAME(S)	EXPOSURE LIMITS CAS NO	CONCENTRATION (%)
1,1-Difluoroethane	75-37-6	100 %

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Contents under pressure. Product may be harmful or fatal if inhaled. Eye irritant. May cause frostbite to skin or eye tissues.

Major Route(s) of Entry: Inhalation, Eye contact, Skin Contact.

Signs and symptoms of Acute Exposure

EYE CONTACT: Irritant. Vapor is irritating to eyes. Liquid is irritating to eyes and may cause tissues to freeze.

SKIN CONTACT: Contact with liquid may cause tissues to freeze (frostbite); chemical itself is not irritating.

SKIN ABSORPTION: Not likely.

INGESTION: Not likely as a potential route of entry, product is a gas at room temperature.

INHALATION: May cause non-specific discomfort such as nausea, headache, or weakness, or temporary nervous system depression with dizziness, confusion, in coordination, drowsiness or unconsciousness. Higher exposures may lead to irritation of the nose, throat, and lungs with cough, difficulty breathing or shortness of breath, temporary alteration of the heart's electrical activity with irregular pulse, palpitations, or inadequate circulation, or abnormal kidney function as detected by laboratory tests. Gross over exposure may be fatal. Individuals with preexisting diseases of the central nervous system, cardiovascular system, lungs, or kidney may have increased susceptibility to the toxicity of excessive exposures.

TARGET ORGANS: Organs affected by exposure are eyes, skin, central nervous system, respiratory system, and the heart.

CARCINOGENIC POTENTIAL: This material does not contain any components which are considered to be carcinogenic by OSHA, IARC, or NTP.

SECTION 4: FIRST AID MEASURES

Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid. For more specific information, refer to Exposure Controls and Personal Protection in Section 8 of this MSDS.

EYE CONTACT: Immediately flush with large amounts of water for at least 15 minutes, occasionally lifting upper and lower eyelids. Get medical attention.

SKIN CONTACT: Flush skin with plenty of water. Remove contaminated clothing. Wash clothing before reuse. Get medical attention if irritation continues. If skin is frostbitten, warm skin slowly with water.

INHALATION: If high concentrations are inhaled move to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm and quiet. Get medical attention immediately.

INGESTION: Ingestion is not considered a potential route of exposure. Product is a gas at room temperature. Never give anything by mouth to an unconscious person.

Note to physician: Because of possible disturbances of cardiac rhythm, catecholamine drugs, such as epinephrine, should be used with special caution only in situations of emergency life support.

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SECTION 5: FIRE FIGHTING MEASURES

NFPA Flammability Classification: LEVEL 1 Aerosol

FLASH POINT: < 50 C (<-58F) **FLAMMABLE LIMITS: UEL** 16.9 % **LEL** 3.9 %

EXTINGUISHING MEDIUM: Water spray, water fog, dry chemical, carbon dioxide, "alcohol" foam.

SPECIAL FIREFIGHTING PROCEDURES:

Fire decomposition of this material will include hydrofluoric acid, and possibly carbonyl fluoride, these are toxic materials. Decomposition may occur when in contact with flames, heating elements, or in gas engines (extreme heat, open flames, glowing metal surfaces) and release irritating, toxic and corrosive gases. Container may rupture if heated due to resulting pressure rise. Wear self-contained breathing apparatus when fighting fires containing or around this product. Shut off all sources of ignition, if possible. Keep exposed containers cool with water spray to prevent rupture. Evacuate all non-trained personnel. Wear full protective clothing, including helmet. Ventilate area. Contain spill and dike, if possible. For leaks or spills water spray can be used to disperse any flammable vapors that may become concentrated or form in poorly ventilated areas and to protect personnel attempting to stop the leak.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Firefighters should wear SCBA's in a positive pressure mode with full face shield. Vapors are heavier than air and may travel long distances and accumulate in low areas or spread along ground from handling site. Eliminate all sources of ignition. Never use welding or cutting torch on or near this product because even just residue can ignite explosively.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Take proper precautions to ensure your own health and safety before attempting spill control or clean-up.

Ventilate area-especially low places where heavy vapors might collect. Extinguish all ignition sources. For small spills/leaks mop, wipe, or soak up on an inorganic material immediately. Remove to vent hood or outside. For large spills/leaks evacuate area, contain spill (dike area), and transfer contained liquid to a DOT approved container for disposal. Keep out of water supply. Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personnel protective equipment.

SECTION 7: ENVIRONMENTAL AND DISPOSAL INFORMATION

Store in tightly sealed containers. Keep away from heat, sparks & open flame. Do not get in eyes, on skin or clothing. Do not breathe vapor, mist or gas. Do not store or transfer to an unmarked container. Do not throw empty containers in trash compactor. Do not store in direct sun. Store containers below 120°F. Read label before using. Empty container may contain hazardous residue. Do not smoke around this product. Do not cut, grind, or weld on or near container due to possible toxic fume generation.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

ENGINEERING CONTROLS: Control airborne concentrations below the exposure limits see below. Use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations. Lethal concentrations may exist in areas with poor ventilation.

PERSONAL PROTECTIVE EQUIPEMNT: If product is used as it is labeled, glasses and gloves might be beneficial.

RESPIRATORY PROTECTION (SPECIFY TYPE): If product is used as labeled, none should be required..

HAND PROTECTION: For brief contact, no precautions should be needed. When prolonged or frequently repeated contact could occur, use protective gloves such as; polyvinyl alcohol or polyethylene.

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SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION (continued)

EYE PROTECTION: Chemical splash goggles in compliance with OSHA regulations are advised; OSHA regulations also permit other type of safety glasses (consult your safety equipment supplier)

BODY PROTECTION: To prevent repeated or prolonged skin contact, use caution.

OCCUPATIONAL EXPOSURE GUIDELINES:

Substance	Applicable Workplace Exposure Levels			WEEL **
	OSHA PEL	ACGIH	AEL *	
1,1-Difluoroethane	NE	NE	1000 ppm (8 hr. TWA)	1000 ppm (8 hr. TWA)

Note: NE Not established (No PEL or TLV has been established for this product), * DuPont, ** AIHA

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Compressed Gas	COLOR: Colorless	ODOR: Ethereal
SPECIFIC GRAVITY: 0.90 (Water =1)	pH: N/A	VAPOR DENSITY (Air =1): 2.4
BOILING POINT RANGE: -13 F (25C)	MELTING POINT /FREEZING POINT: N/D	
VAPOR PRESSURE (mmHg or psig @70°F): 87 psia		VISCOSITY (cps @ 70°F) N/A
SOLUBILITY IN WATER % BY WT.: 0.28 %		
VOLATILE ORGANIC COMPOUNDS (VOCs) Content: 100%		

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable, avoid open flames, welding arcs or other high temperature sources which induce thermal decomposition and direct sunlight.

INCOMPATIBILITY: Avoid contact with alkali or alkaline earth metals – powdered AL, Zn, Be, ECT..

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrofluoric acid, and possibly carbonyl fluoride.

HAZARDOUS POLYMERIZATION: Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

Animal data

Oral ALD: > 1500 mg/kg in rats

Inhalation ALC, 4 hr,: 383,000 ppm in rats

This product has not been tested for skin and eye irritancy, or for animal sensitization.

Ingestion of a single high doses caused weight loss and lethargy.

Inhalation of high levels caused labored breathing, lung irritation, lethargy, incoordination and loss of consciousness.

Cardiac sensitization occurred in dogs exposed to a concentration of 150,000 ppm in air and given intravenous epinephrine challenge.

Repeated inhalation exposures caused increased urinary fluoride, kidney weight, and reversible kidney changes. Based on an independent peer review the reversible kidney changes are considered artifacts of the tissue and slide processing and not a compound related effect.

Animal testing demonstrate no carcinogenic activity or developmental effects. No animal data are available to define reproductive effects.

This product has not produced genetic damage in bacterial cultures. There are reports indicating that it has produced genetic damage in mammalian cell culture tests. A weak genotoxic effect in germ cells of drosophila melanogaster has been reported. It has not been tested in animals.

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SECTION 16: OTHER INFORMATION

REVISION INFORMATION

VERSION NUMBER:1.0002

REVISION DATE: 7/1/2010 Supersedes 2-25-2007,

PRINT DATE: 7/1/2010

ABBREVIATIONS:

N/A: Not Applicable

N/D: Not Determined

NE: Not Established

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

OSHA: Occupational Safety and Health Administration

HMIS: Hazardous Materials Information System NFPA: National Fire Protection Association

EPA: US Environmental Protection Agency

NIOSH: National institute of Occupational Safety and Health

DISCLAIMER OF LIABILITY:

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