

SAFETY DATA SHEET (SDS)

Section 1: IDENTIFICATION

TRADE NAME	Gebauer's Pain Ease®	MANUFACTURER	Gebauer Company 4444 East 153 Street Cleveland, Ohio 44128
CHEMICAL NAME	1,1,1,3,3-Pentafluoropropane 1,1,1,2-Tetrafluoroethane	CONTACT INFORMATION	Toll Free: (800) 321-9348 Phone: (216) 581-3030 Fax: (216) 581-4970
RECOMMENDED USE	Topical Anesthetic	IN CASE OF EMERGENCY	CHEMTREC - (800) 242-9300 or (703) 527-3887
FORMULA	CHF ₂ CH ₂ CF ₃ / CH ₂ FCF ₃	CHEMICAL FAMILY	Halogenated Hydrocarbon

Section 2: HAZARDS IDENTIFICATION

Health Rating Flammability Rating Reactivity Rating Special Rating Lab Protective Equipment		2 - Moderate 0 - None 1 - Moderate None Neoprene or Viton gloves, lab coat, goggles or face shield, vent hood.		
Hazard Category	Signal Word	Hazard Statement	Pictogram	Precautionary Statement
Compressed Gas	Warning	Contains gas under pressure; may explode if heated		Store in a well-ventilated place.
Eye Irritation (Category 2B)	Warning	Causes eye irritation	N/A	If product gets into eyes, see the Section 4: First Aid Measures.
Cause		Effects		
Potential Acute Health Effects	Inhalation	When oxygen levels in air are reduced to 12-14% by displacement, symptoms of asphyxiation, loss of coordination, increased pulse rate and deeper respiration will occur. At high levels, cardiac arrhythmia may occur.		
	Ingestion	Unlikely route of exposure due to gaseous nature. Discomfort due to volatility would be expected.		
	Eye Contact	Liquid contact can cause irritation and frostbite.		
	Skin Contact	Over application could cause frostbite. Liquid contact is non-irritating.		

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Concentration	OSHA PEL	ACGIH TLV-TWA
1,1,1,3,3-Pentafluoropropane	460-73-1	95%	None	None
1,1,1,2-Tetrafluoroethane	811-97-1	5%	None	None

Section 4: FIRST AID MEASURES

Inhalation	Immediately remove patient to fresh air. If breathing has stopped, give artificial respiration. Use oxygen as required, provided a qualified operator is available. DO NOT give epinephrine (adrenaline). Get medical attention immediately.
Ingestion	Unlikely route of exposure due to gaseous nature. DO NOT induce vomiting unless instructed to do so by a physician. DO NOT give stimulants. Get medical attention immediately.
Skin Contact	If there is evidence of frostbite seek medical attention.
Eye Contact	Immediately flush eyes with copious amounts of water for at least 15 minutes (in case of frostbite water should be lukewarm, not hot) lifting lids occasionally to facilitate irrigation. Get medical attention.

Section 5: FIRE FIGHTING MEASURES

Special Fire Fighting Procedures

Fire fighters should wear self-contained, NIOSH approved breathing apparatus for protection against possible toxic decomposition products. Proper eye and skin protection should be provided. Use spray to keep fire-exposed containers cool.

Unusual Fire and Explosion Hazards

Not flammable at ambient temperatures and atmospheric pressure. However this material will become combustible when mixed with air under pressure and exposed to strong ignition sources contact with certain reactive metals may result in formation of explosive or exothermic reactions under specific conditions (e.g. very high temperatures and/or appropriate pressures).

Section 6: ACCIDENTAL RELEASE MEASURES

Spill and Leak Response

If a large quantity of containers the product has been released, evacuate unprotected personnel. Protected personnel should eliminate all sources of ignition and shut off leak, if without risk, and provide ventilation.

Waste Disposal Method

Comply with federal, state and local laws.

Section 7: HANDLING AND STORAGE

Storage Precautions

Store in cool, dry, well ventilated area of low fire risk. Protect against physical damage. Do not subject to temperatures above 120°F (50°C).

Handling Precautions

Use in well-ventilated areas. Do not use near temperatures above 120°F (50°C).

Section 8: EXPOSURE CONTROLS – PERSONAL PROTECTION

Engineering Controls

Provide local ventilation at filling zones and where leakage is probable. Use with adequate ventilation.

Respiratory Protection

None generally required for adequately ventilated work situations. For accidental release in confined space, where the concentration may be above the PEL of 1,000 ppm, use a NIOSH approved, self contained, positive pressure respirator for emergencies and in situations where air may be displaced by vapors.

Skin Protection

Use protective, impervious gloves and clothing made of neoprene, nitrile or butyl rubber if prolonged or repeated contact with liquid is anticipated. Wash clothing promptly, if wet. Remove any non-impervious clothing and wash before re-use.

Eye Protection

For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles. Contact lenses should not be worn under such conditions.

Exposure Limits

OSHA PEL: None ACGIH TLV: None

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	44.6°F (7.0°C)	Vapor Pressure (@72°F):	10.8 psig	Flash Point	None
Evaporation Rate: (Carbon Tetrachloride = 1)	>1	Specific Gravity (@72°F):	1.33	Flammable Limits in Air: (by Volume)	Nonflammable
Vapor Density:	Air=1 BP 4.7	Appearance:	Colorless Liquid	Odor:	Faint Ethereal, Sweet

Section 10: STABILITY AND REACTIVITY

Stability	Product is stable under normal conditions.
Hazardous Decomposition Products	Halogens and halogen acids; and possibly carbonyl halides.
Incompatible Materials	Strong acids and alkalis, reactive metals e.g., powdered or freshly abraded aluminum (may cause strong exothermic reaction), sodium, potassium, calcium, magnesium, zinc, molten aluminum, barium and lithium shavings. Strong oxidizing agents.
Hazardous Polymerization	Does not occur.
Conditions to Avoid	Avoid sources of ignition such as sparks, hot spots, welding flames and lighted cigarettes which may yield toxic and/or corrosive decomposition products. Do not mix with oxygen or air above atmospheric pressure.

Section 11: TOXICOLOGICAL INFORMATION

Dermal Irritation	Non-irritation and not a skin sensitizer.
Eye Irritation	Very slight irritant.
Inhalation	Evidence of transient anesthetic effect. 1,1,1,2-Tetrafluoroethane: Lowest observed adverse effect level for cardiac sensitization was 75,000ppm.

Section 12: ECOLOGICAL INFORMATION

Environmental Stability	Gas is dissipated rapidly in a ventilated area.
Effect on Aquatic Life	CAS 40-73-1: Acute Toxicity to Rainbow Trout (Limit Test): NOEC >10 mg/L; 96 hr. EC ₅₀ >8108 mg/L CAS 811-97-1: Acute Toxicity to Rainbow Trout (Limit Test): 96 hr. LC50 is 450 mg/L

Section 13: DISPOSAL CONSIDERATIONS

Waste disposal must be in accordance with appropriate Federal, State and local regulations.

Section 14: TRANSPORT INFORMATION

DOT	UN Number	UN 3163
	Proper Shipping Name	Liquefied Gas, N.O.S (1,1,1,3,3-Pentafluoropropane, 1,1,1,2-Tetrafluoroethane)
	Class	2.2, Non-Flammable Gas
	Hazard Label	Limited Quantities
IATA	UN Number	UN 3163
	Proper Shipping Name	Liquefied Gas, N.O.S (1,1,1,3,3-Pentafluoropropane, 1,1,1,2-Tetrafluoroethane)
	Class	2.2, Non-Flammable Gas
	Hazard Label	Air-Specific Limited Quantities

Section 15: REGULATORY INFORMATION

USA TSCA	Not Listed
Europe EINECS	Not Listed
SARA Title III	RQ's and EHS TPQ: Not Listed. Sections 311, 312: Not Listed
WHMIS Classification (Canada)	SDS meets requirements of SPR
European Union	Not Listed as Hazardous Substance
Additional Regulatory Information	Contains greenhouse gases, which may contribute to global warming. Regulated in the US under Section 612 (SNAP) of the Clean Air Act and 40 CFR Part 82, subpart G.

Section 16: OTHER INFORMATION

This SDS was revised and updated as of 08/20/2013 by Gebauer Company.

INFORMATION CONTAINED IN THIS SAFETY DATA SHEET IS OFFERED WITHOUT CHARGE FOR USE BY TECHNICALLY QUALIFIED PERSONNEL AT THEIR DISCRETION AND RISK. ALL STATEMENTS, TECHNICAL INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BASED ON TESTS AND DATA WHICH WE BELIEVE TO BE RELIABLE, BUT THE ACCURACY OR COMPLETENESS THEREOF IS NOT GUARANTEED AND NO WARRANTY OF ANY KIND IS MADE WITH RESPECT THERETO. THIS INFORMATION IS NOT INTENDED AS A LICENSE TO OPERATE UNDER OR A RECOMMENDATION TO PRACTICE OR INFRINGE ANY PATENT OF THIS COMPANY OR OTHER COVERING ANY PROCESS, COMPOSITION OF MATTER OR USE. SINCE THE COMPANY SHALL HAVE NO CONTROL OF THE USE OF THE PRODUCT DESCRIBED HEREIN, THE COMPANY ASSUMES NO LIABILITY OF LOSS OR DAMAGE INCURRED FROM THE PROPER OR IMPROPER USE OF SUCH PRODUCT.