GEBAUER COMPANY 9410 ST. CATHERINE AVE.

MATERIAL SAFETY DATA SHEET

GEBAUER'S INSTANT ICETM

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	I.	IDENTIFICATION	ON
TRADE NAME SYNONYM	Gebauer 's Instant Ice TM	REVISION DATE	
CHEMICAL NAME SYNONYMS	1,1,1,3,3-PENTAFLUOROPROPANE 1,1,1,2-TETRAFLUOROETHANE	CAS NO.	SEE II
CHEMICAL FAMILY	HALOGENATED HYDROCARBON	FORMULA	CHF ₂ CH ₂ CF ₃ \F ₃ CCH ₂ F,

	II. HAZARDOUS INGREDIENTS								
PRINCIPAL HAZARDOUS COMPONENTS					CAS NO.	%	EXPOSURE LIMITS		
1,1,1,3,3-PENTAFLUOROPROPANE 1,1,1,2-TETRAFLUOROETHANE					460-73-1 811-97-1	95 5	OSHA PEL: NONE ACGIH TLV: NONE		
	HEALTH 2 CHE FLAMMABILITY 1 AC REACTIVITY 1 FIRE PERSONAL PROTECTION See Sec. PRE	A HAZARD CATEGORIES IRONIC HEALTH NO CUTE HEALTH YES RE HAZARD NO RESSURE HAZARD YES EACTIVITY HAZARD YES	S S S S	LISTS EXTREMELY HAZARDOUS SUBSTANCE: CERCLA HAZARDOUS SUBSTANCE TOXIC CHEMICALS	NO NO NO			twa (8 hrs.): 300 ppm	

III. PHYSICAL DATA						
BOILING POINT: 44.6 ?F (7.0?C)		EVAPORATION RATE: GREATER THAN 1				
VAPOR PRESSURE: at 72? F (22?C) = 10.8 psig	SPECIFIC GRAVITY (H ₂ O)=1.33 at 77?F	(Carbon tetrachloride = 1)				
VAPOR DENSITY: (AIR=1) at BP 4.7	PERCENT VOLATILE BY VOLUME: 100					
SOLUBILITY IN WATER: <1%						
APPEARANCE AND ODOR: COLORLESS						

IV. FIRE AND EXPLOSION HAZARDS						
FLASH POINT(METHOD USED): N/A	AUTO-IGNITION TEMPERATURE: UNKNOWN					
FLAMMABLE OR EXPLOSIVE LIMITS IN AIR BY % VOLUME: NON FLAMM	ABLE					
EXTINGUISHING MEDIA: Use standard agent-chose one most appropriate for type of surrounding fire (material itself is not flammable).						

SPECIAL FIREFIGHTING 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).

V. HEALTH HAZARDS

OSHA PEL: NONE ACGIH TLV: NONE

EFFECTS OF OVEREXPOSURE:

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

SKIN: Liquid contact could cause frostbite

EYES: Liquid contact can cause severe irritation and frostbite. Mist may irritate

EMERGENCY FIRST AID PROCEDURES FOR:

INHALATION: Immediately remove to fresh air. If breathing has stopped, give artificial respiration. Use oxygen as required, provided a qualified operator is available. Get medical

attention. DO NOT give epinephrine.

EYES: 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

SKIN: Promptly flush skin with water until chemical is removed. Remove contaminated clothing and wash before reuse. If there is evidence of frostbite, bathe (do not rub)

with lukewarm (not hot) water. Seek medical attention if symptoms persist

INGESTION: Ingestion is unlikely because of the physical properties and not expected to be hazardous DO NOT induce vomiting unless instructed by a physician. DO NOT give

stimulants. Get medical attention immediately.

VI. REACTIVITY DATA STABILITY: **CONDITIONS TO AVOID:** UNSTABLE ANY SOURCE OF HIGH TEMPERATURE SUCH AT FLAMES, HOT SPOTS OR WELDING MAY YIELD TOXIC AND/OR CORROSIVE DECOMPOSITION. DO x STABLE NOT MIX WITH OXYGEN OR AIR ABOVE ATMOSPHERIC PRESSURE **INCOMPATIBILITY (MATERIALS TO AVOID):** STRONG ACIDS. ALKALIS, REACTIVE METALS E.G., POTASSIUM, CALCIUM, ABRADED/POWDERED ALUMINUM SURFACES, ZINC & MAGNESIUM. HAZARDOUS DECOMPOSITION PRODUCTS: HALOGENS, HALOGEN ACIDS, AND POSSIBLY CARBONYL HALIDES HAZARDOUS MAY OCCUR CONDITIONS TO AVOID: STORING PRODUCT AT HIGH TEMPERATURES AND/OR x WILL NOT OCCUR POLYMERIZATION: **PRESSURE**

	VII. SPILL OR LEAK PROCEDURES
IN CASE MATERIAL IS RELEASED OR SPILLED:	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; RETURN UNUSED QUANTITIES TO GEBAUER CO BY MAKING APPROPRIATE ARRANGEMENTS FOR PICKUP AND TRANSPORTATION.

VIII. SPECIAL PROTECTION INFORMATION								
RESPIRATORY	ESPIRATORY 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 SELF CONTAINED, NIOSH APPROVED BREATHING APPARATUS OF SUPPLIED AI RESPIRATOR. FOR ESCAPE: USE THE FORMER OR A NIOSH APPROVED GAS MAKE WITH ORGANIC VAPOR CANISTER							
PROTECTION:	PROTECTION: FOR CLINICAL SETTING: MINIMIZE INHALATION OF VAPORS BY PATIENT, ESPECIALLY WHEN APPLYING TO HEAD AND NECK.							
VENTILATION:	PROVIDE LOCAL VENTILATION AT FILLING ZONES	AND WHERE LEAKAGE IS PROBABLE MECHANICAL (GENERAL): VENTILATION MAY BE ADEQUATE FOR OTHER OPERATING AND STORAGE AREA						
PROTECTIVE GLOVES:	IF PROLONGED CONTACT WITH THE LIQUID OR GAS IS ANTICIPATED, INSULATED GLOVES CONSTRUCTED OF PVA, NEOPRENE OR BUTYL RUBBER SHOULD BE USED	EYE SAFETY GLASSES OR CHEMICAL GOGGLES PROTECTION: FOR PATIENT USE: COVER PATIENT'S EYES, IF APPLYING ON OR NEAR FACE.						
OTHER PROTECTIVE EQUIPMENT: EYEBATH		FOR CLINICAL SETTING: GLOVES AND GOGGLES ARE NOT REQUIRED.						

IX. SPECIAL PRECAUTIONS								
HANDLING AND STORAGE:				Cool, dry, well-ventilated area avoided. Close valve tightly a	A LOW OF FIRE RISK AND OUT OF DIRECT SUNLIGHT. AFTER USE AND WHEN EMPTY			
OTHER PRECAUTIONS:	OTHER PRECAUTIONS: CONTAINS HFC-134A AND HFC 245FA, A GREENHOUSE GAS WHICH MAY CONTRIBUTE TO GLOBAL WARMING. HFC-134A AND HFC 245FA ARE SUBJECT TO U.S. ENVIRONMENTAL PROTECTION AGENCY CLEAN AIR ACT REGULATIONS AT 40 CFR PART 82							
D.O.T. PROPER SHIPPING NAME:	D.O.T. PROPER SHIPPING NAME: Gebauer's Instant Ice; ID NO.:							
D.O.T. CLASSIFICATION:	Not Regulated;	ID HAZARD CLASS:	2.21	DOT LABELING:	Not Applicapable			

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