3M Center St. Paul, Minnesota 55144-1000 612/733-1110 Duns No.: 00-617-3082

MATERIAL SAFETY DATA SHEET



DIVISION: ADHESIVES, COATINGS AND SEALERS

TRADE NAME:

3M Gasket Prep and Parts Cleaner PART NO. 08909 (XA)

3M I.D. NUMBER: XS-0414-0235-4 62-4900-9909-0 62-4995-5009-3 62-9814-9909-8

ISSUED: DECEMBER 30, 1989 SUPERSEDES: DECEMBER 15, 1989

DOCUMENT: 10-9648-6

1. INGREDIENT	C.A.S. NO.	PERCENT	I EXPOSURE VALUE UNIT	LIMITS TYPE AUTH
l,1,1-trichloroethane	71-55-6	80.0 - 90.0	350 ppm	TWA ACGI:
propane	74-98-6	10.0 - 20.0	1000 ppm	TWA OSHA
l,4-dioxane	123-91-1	1.0 - 2.0	25 ppm	TWA ACGI:

SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

- OSHA: Occupational Safety and Health Administration

NOTE: Product is also component of 5-part kit sold as 3M Gasketing System Kit PART NO. 08900; (3M ID NO. 62-9814-9909-8).

THIS PRODUCT CONTAINS THE FOLLOWING TOXIC CHEMICAL OR CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372:

1,1,1-trichloroethane

1,4-dioxane

2. PHYSICAL DATA

BOILING POINT:.... Compressed Gas VAPOR PRESSURE:
VAPOR DENSITY:
EVAPORATION RATE: Compressed Gas $4.00 \, \text{Air} = 1$ 2.70 E ther = 1SOLUBILITY IN WATER: Essentially nil SP. GRAVITY:
PERCENT VOLATILE:
VOLATILE ORGANICS: N/A 100.00 % 190.00 gm/1 pH: N/D

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... -50.00 F T.C.C.

(propane as propellant)
FLAMMABLE LIMITS - LEL: 8.00 %
FLAMMABLE LIMITS - UEL: 10.50 %
AUTOIGNITION TEMPERATURE: N/D
EXTINGUISHING MEDIA: 10.50 %

CO2, foam, dry chemical SPECIAL FIRE FIGHTING PROCEDURES:

Fire fighters should wear self-contained breathing apparatus when fighting fires involving this material.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Extremely Flammable. Treat as a pressurized container. Overheated, closed containers adjacent to fire could explode due to internal pressure buildup. Contact with aluminum or zinc (galvanized) parts

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3. FIRE AND EXPLOSION HAZARD DATA (continued)

in a pressurized fluid system may result in explosion. NFPA-HAZARD-CODES: HEALTH 3 FIRE 4 REACTIVITY 1 UNUSUAL REACTION HAZARD: None

4. REACTIVITY DATA

STABILITY: Stable INCOMPATIBILITY - MATERIALS TO AVOID:

Contact with aluminum or zinc (galvanized) parts in a pressurized fluid system may result in explosion. CONDITIONS TO AVOID: Do not puncture or incinerate container. Do not store at temperatures above 120F

HAZARDOUS POLYMERIZATION: Will Not Occur HAZARDOUS DECOMPOSITION PRODUCTS:

CO, CO2, HCl and possible amounts of chlorine and phosgene when subjected to excessive heat or flame.

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:

If cans rupture: Extinguish all ignition sources. Ventilate the area. Observe precautions from other sections. Contain spill. Cover with absorbent materials as needed. Collect spilled material. Place in a U.S. Dept. of Transportation - approved metal container, and seal.

RECOMMENDED DISPOSAL:

Incinerate absorbed product and partially full cans after mixing with flammable material in a hazardous waste facility. Do not puncture or burn cans in a household incinerator. Dispose of empty cans in a sanitary landfill. Disposal should be in accordance with applicable regulations. U.S. EPA HAZARDOUS WASTE NUMBER: DOO1 (Ignitable).

ENVIRONMENTAL DATA:

Volatile Organic Compound (VOC):
Maximum VOC = 190 grams/liter.
Maximum VOC minus Water minus Exempt Solvents = 499 grams/liter. VOC's were calculated according to Rule 443.1 of the South Coast Air Quality Management District (SCAQMD).

SARA HAZARD CLASS: FIRE HAZARD: Yes PRESSURE: Yes REACTIVITY: No ACUTE: Yes CHRONIC: Yes

6. SUGGESTED FIRST AID

EYE CONTACT:

Immediately flush eyes with large amounts of water for at least 10 minutes. Call a physician.

SKIN CONTACT:

Wash affected area with soap and water.

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6. SUGGESTED FIRST AID

(continued)

INHALATION:

Move affected person to uncontaminated air. Send for medical assistance.

IF SWALLOWED:

Do not induce vomiting. Immediately call a physician or poison control center.

OTHER FIRST AID: NONE

7. PRECAUTIONARY INFORMATION

Keep product and its vapors away from heat, sparks, flame and other sources of ignition. The vapors released by this product can easily be ignited and burn explosively. Use only in areas with sufficient ventilation to maintain vapor and spray concentrations below recommended exposure limits. Avoid prolonged breathing of vapor and mist. Avoid eye and skin contact; wear protective equipment such as chemical safety goggles and impervious gloves when spraying product. Avoid vapor contact with open flames, welding arcs or other high temperature sources which might cause vapor decomposition to produce harmful gases. For high volume usage, local exhaust ventilation may be needed. Keep out of the reach of children. Use only as directed. Do not take internally. Intentional misuse by deliberately concentrating and inhaling or swallowing may be harmful or fatal. Do not puncture or incinerate can. Do not store at temperatures above 120F.

ADDITIONAL EXPOSURE LIMITS

			EXPOSURE	LIMITS	
**********	INGREDIENTS	VALUE	UNIT	TYPE	AUTH
	l,l,l-trichloroethane	1900	mg/m3	TWA	ACGIH
	l,l,l-trichloroethane	450	ppm	STEL	ACGIH
	l,l,l-trichloroethane	2450	mg/m3	STEL	ACGIH
	l,l,l-trichloroethane	350	mag	TWA	OSHA
_	l,l,l-trichloroethane	1900	mg/m3	TWA	OSHA
	l,l,l-trichloroethane	450	ppm	STEL	OSHA
	l,l,l-trichloroethane	2450		STEL	OSHA
	propane	1800	mg/m3	TWA	OSHA
	l,4-dioxane	90	mg/m3	TWA	ACGIH
	l,4-dioxane	25		TWA	OSHA
	l,4-dioxane	90	mg/m3	TWA	OSHA

SOURCE OF EXPOSURE LIMIT DATA:

- ACGIH: American Conference of Governmental Industrial Hygienists
- OSHA: Occupational Safety and Health Administration

Abbreviations: N/D - Not Determined N/A - Not Applicable

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8. HEALTH HAZARD DATA

EYE CONTACT: Liquid and vapor may cause eye irritation.

SKIN CONTACT: May cause skin irritation.

INHALATION: Overexposures to vapor concentrations that exceed recommended exposure limits may cause respiratory system irritation and temporary nervous system impairment (light-headedness). Deliberate misuse by concentration and inhalation of 1,1,1-trichloroethane may cause sudden death. Chronic overexposure to 1,1,1-trichloroethane may cause mild liver and kidney injury, and heart rhythm disturbances. Symptoms of overexposure may include headache, dizziness, nausea, giddiness, vomiting, diarrhea, and incoordination.

INGESTION: Accidental ingestion is unlikely from an aerosol container. Intentional concentration and swallowing of the liquid may cause digestive system irritation and nervous system impairment. Ingestion of large amounts of 1,1,1-trichloroethane may cause nausea, vomiting, burns, lowered blood pressure, heart rhythm disturbances and mild liver and kidney damage. Intentional concentration and swallowing the liquid product can be harmful or fatal. Symptoms of overexposure may include nausea, vomiting, diarrhea, dizziness, sleepiness, decreased reaction time and slurred speech. Solvent aspiration into the lungs as a result of vomiting may cause lung damage, which can be fatal.

NOTE: 1,1,1-trichloroethane contains stabilizers, including 1,4-dioxane (diethylene ether), a potential cancer hazard (NTP, IARC). No carcinogenic potential was revealed from studies in which laboratory animals were exposed by inhalation or ingestion to 1,1-trichloroethane containing 2.0% 1,4-dioxane. No birth defects or reproductive disorders were observed among exposed laboratory animals.

SECTION CHANGE DATES

ENVIRON. DATA SECTION CHANGED SINCE DECEMBER 15, 1989 ISSUE

Abbreviations: N/D - Not Determined N/A - Not Applicable

The information on this Data Sheet represents our current data and best opinion as to the proper use in handling of this material under normal conditions. Any use of the material which is not in conformance with this Data Sheet or which involves using the material in combination with any other material or any other process is the responsibility of the user.