

MATERIAL SAFETY DATA SHEET



Date Issued: 11/06/2009
MSDS No: 11-400
Date Revised: 11/06/2009
Revision No: 6

MIRACLE-Kingco PF-101 Duct Liner Adhesive (item #062, 063, 064)

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MIRACLE-Kingco PF-101 Duct Liner Adhesive (item #062, 063, 064)

MANUFACTURER

ITW TACC
56 Air Station Industrial Park
Rockland MA 02370
Product Stewardship: (781) 878-7015
Service Number: (800) 503-6991

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (US Transportation): (800) 424-9300

2. HAZARDS IDENTIFICATION

HAZARD DESIGNATION

"Xn" - Harmful

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: WARNING! Contains crystalline silica (quartz). Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs. Silicosis may be progressive; it may lead to disability and death. Crystalline silica (quartz) inhaled from occupational sources is classified as carcinogenic to humans.

POTENTIAL HEALTH EFFECTS

EYES: Mildly irritating to the eyes.

SKIN: Not likely to be absorbed in toxic amounts. Prolonged exposure may cause skin irritation. Avoid skin contact as much as possible.

SKIN ABSORPTION: None Expected.

INGESTION: This material may be harmful or fatal if swallowed in large quantities. Small amounts are not expected to produce adverse health effects.

INHALATION: Materials are low in volatility and are not likely to pose a problem under normal operating conditions. Slight irritation to nose and throat with prolonged or repeated exposure.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Slight irritation.

SKIN: Slight skin irritation.

SKIN ABSORPTION: None Expected.

INGESTION: None known, not likely route of entry.

INHALATION: Materials are low in volatility therefore not likely to pose a problem.

CHRONIC EFFECTS: None Expected.

CARCINOGENICITY: IARC has concluded that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group I)".

IARC has also concluded that vinyl acetate is "possibly carcinogenic to humans (Group 2B)".

MUTAGENICITY: None known.

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REPRODUCTIVE TOXICITY

REPRODUCTIVE EFFECTS: None known.

TERATOGENIC EFFECTS: None known.

ROUTES OF ENTRY: Eye and skin contact. Inhalation and ingestion are unlikely routes of entry.

TARGET ORGAN STATEMENT: None known.

IRRITANCY: Slight eye and skin irritation.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS	EINECS	Classification
Diethylene Glycol	1 - 5	000111-46-6	203-872-2	Xn; 22
Silica, Crystalline	0.1 - 1	014808-60-7	238-878-4	Xn; 48/20-40/20
Vinyl Acetate	< 0.5	000108-05-4	203-545-4	F, Xn; 11-20-21-22-36-45

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of tempered water (at least 15-20 minutes) lifting upper and lower eye lids occasionally. Get immediate medical attention.

SKIN: Wash with soap and water. Get medical attention if irritation develops or persists.

INGESTION: Small amounts are not expected to produce adverse health effects. Larger amounts should be recovered by aspiration. Get medical attention.

INHALATION: No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

5. FIRE FIGHTING MEASURES

FLAMMABLE LIMITS:

Notes: Not Applicable

FLAMMABLE CLASS: Class IIIB

GENERAL HAZARD: Combustible Liquid.

EXTINGUISHING MEDIA: Water spray, carbon dioxide, dry chemical or foam.

HAZARDOUS COMBUSTION PRODUCTS: Carbon Monoxide, Carbon Dioxide

EXPLOSION HAZARDS: Decomposition products may cause a health hazard.

FIRE FIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear. After water evaporates,

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remaining material will burn.

SENSITIVE TO STATIC DISCHARGE: Not Applicable

SENSITIVITY TO IMPACT: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Fumes, smoke, carbon monoxide and carbon dioxide may form when heated to decomposition.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on absorbent, such as sawdust or vermiculite, and sweep into closed containers for disposal. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal. Only those persons who are adequately trained, authorized, and wearing the appropriate personal protective equipment (PPE) should participate in spill response and clean-up.

LARGE SPILL: Keep spectators away. Only those persons who are adequately trained, authorized and wearing the required personal protective equipment (PPE) should participate in spill response and clean-up. Know and prepare for spill response before using or handling this product. Dike and contain spill with inert material (e.g. sand, earth). Transfer liquids to covered and labeled containers for disposal. Use appropriate PPE. Place absorbent diking materials in covered containers for disposal. Prevent contamination of sewers, streams, and groundwater with spilled material or used absorbent.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: For professional or industrial use only. Follow label instructions. Keep out of the reach of children. Not for consumption. No smoking. Do not breathe vapors. Avoid contact with body. Empty containers must not be washed and re-used for any purpose. Contact lens wearers must wear protective eye wear around chemical vapors and liquid. Wash hands thoroughly after handling. To prevent build-up of vapors, use adequate natural and/or mechanical ventilation (e.g. open all windows and doors to achieve cross ventilation).

HANDLING: Use with sufficient ventilation to keep employee exposure below recommended limits. Provide adequate ventilation for storage, handling and use, especially for enclosed or low spaces. Avoid contact of liquid with eyes and prolonged skin exposure. Follow all MSDS/label precautions even after container is emptied because they may retain product residues.

STORAGE: Keep container closed when not in use. Store in a dry well ventilated area, out of the sun and away from ignition sources. Do not remove or deface label. Prevent water or moist air from entering container.

STORAGE TEMPERATURE: 15.5°C (60°F) Minimum to 35°C (95°F) Maximum

SHELF LIFE: 6 months from manufacture date

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³
Diethylene Glycol	TWA	NL [1]	NL [1]	NL [1]	NL [1]
	STEL	NL [1]	NL [1]	NL [1]	NL [1]
Silica, Crystalline	TWA	NL	0.1 mg/m ³	NL	0.05 mg/m ³
	STEL	NL [1]	NL [1]	NL [1]	NL [1]
Vinyl Acetate	TWA	NL [1]	NL [1]	10 ppm	35 mg/m ³
	STEL	NL [1]	NL [1]	15 ppm	53 mg/m ³
Footnotes:					
1. NL = Not Listed					

ENGINEERING CONTROLS: Natural ventilation should be adequate under normal conditions.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields. A face shield may be necessary if spraying the product.

SKIN: Wear impervious gloves, if needed, to prevent repeated or prolonged skin contact.

RESPIRATORY: No respiratory protection required under normal conditions.

WORK HYGIENIC PRACTICES: Wash hands thoroughly after use.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

COLOR: White

PERCENT VOLATILE: 40.4

Notes: by weight

BOILING POINT: >= 100°C (212°F)

SOLUBILITY IN WATER: Soluble

EVAPORATION RATE: < 1.0 (n-Butyl Acetate=1)

DENSITY: 9.82 lbs/gal

SPECIFIC GRAVITY: 1.178

(VOC): 0.700 gr/L EPA Method 24 VOC

Notes: Photochemically Reactive Only VOC: 0.3 gr/L

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COMMENTS: 0.0005 lb VHAP/lb Solid
 0.03% by weight HAP

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

STABILITY: Stable.

POLYMERIZATION: Product will not undergo polymerization.

CONDITIONS TO AVOID: None known.

POSSIBILITY OF HAZARDOUS REACTIONS: None Expected.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and carbon dioxide may form when heated to decomposition.

INCOMPATIBLE MATERIALS: Strong acids or alkaline materials.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Diethylene Glycol	25300 mg/kg	11900 mg/kg	No data
Silica, Crystalline	No data	No data	No data
Vinyl Acetate	2920 mg/kg	2335 mg/kg (rabbits)	2500 ppm (4-hr rabbit)

CARCINOGENICITY

Chemical Name	NTP Status	IARC Status
Silica, Crystalline	1	1
Vinyl Acetate		2B

IARC: IARC has concluded that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group I)".

IARC has also concluded that vinyl acetate is "possibly carcinogenic to humans (Group 2B)".

OSHA: Not Applicable

Notes: This product contains silica quartz, a chemical known to the State of California to cause cancer.

IRRITATION: Slight eyes and skin irritation.

CORROSIVITY: Not Applicable

SENSITIZATION: Not Applicable

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NEUROTOXICITY: Not Applicable
GENETIC EFFECTS: Not Applicable
REPRODUCTIVE EFFECTS: Not Applicable
TERATOGENIC EFFECTS: Not Applicable
MUTAGENICITY: Not Applicable
SYNERGISTIC MATERIALS: Not Applicable

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: This product contains components that will normally float on water. These components may be harmful to aquatic organisms and may cause long term adverse effects in the aquatic environment.

ECOTOXICOLOGICAL INFORMATION: Contains components that are potentially toxic to freshwater and saltwater ecosystems.

BIOACCUMULATION/ACCUMULATION: Contains components with the potential to bio-accumulate.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of in accordance with all local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not Regulated

MARINE POLLUTANT #1: None

SPECIAL SHIPPING NOTES: If individual container size is less than 1.3 gallons, the proper shipping name is:
 ORM-D Consumer Commodity
 Non-Regulated

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

FIRE: No **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** No **CHRONIC:** No

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
Vinyl Acetate	< 0.5	000108-05-4

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CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

Chemical Name	Wt.%	CERCLA RQ
Vinyl Acetate	< 0.5	5,000

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS	TSCA SECTION
Diethylene Glycol	000111-46-6	
Silica, Crystalline	014808-60-7	
Vinyl Acetate	000108-05-4	12b,

CLEAN AIR ACT

Chemical Name	Wt.%	CAS
Diethylene Glycol	1 - 5	000111-46-6
Vinyl Acetate	< 0.5	000108-05-4

STATES WITH SPECIAL REQUIREMENTS

Chemical Name	Requirements
Silica, Crystalline	New Jersey Right to Know List Pennsylvania Right to Know List Massachusetts Toxic Use Reduction Act (TURA) Reportable Chemical
Vinyl Acetate	New Jersey Right to Know List Pennsylvania Right to Know List Massachusetts Toxic Use Reduction Act (TURA) Reportable Chemical

CALIFORNIA PROPOSITION 65

Chemical Name	Wt.%	Listed
Silica, Crystalline	0.1 - 1	• Cancer

CANADA

WHMIS HAZARD SYMBOL AND CLASSIFICATION



EUROPEAN COMMUNITY

MATERIAL SAFETY DATA SHEET



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EEC LABEL SYMBOL AND CLASSIFICATION



"Xn" - Harmful

16. OTHER INFORMATION

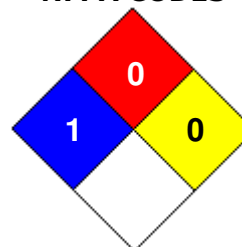
INFORMATION CONTACT: (781) 878-7015

REVISION SUMMARY: Revision #: 6 This MSDS replaces the November 06, 2009 MSDS. Any changes in information are as follows: In Section 9 Color

HMIS RATING

HEALTH:	1
FLAMMABILITY:	0
PHYSICAL HAZARD:	0
PERSONAL PROTECTION:	B

NFPA CODES



GENERAL STATEMENTS: Keep out of reach of children

For professional or industrial use only

If you cannot read, or do not understand all directions, cautions, and warnings, do not use this product

For spray applications, use only with approved equipment

MANUFACTURER DISCLAIMER:

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