
1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTIFICATION

Brand Name..... MANUS-BOND 65-C
Product Use Adhesive / Sealant
Product Identification Number UN 1133

MANUFACTURER

Manus Products, Inc.
866 Industrial Blvd West
Waconia, MN 55387

EMERGENCY TELEPHONE NUMBER

CHEMTREC: 800-424-9300
Plant Telephone: 952 442-3323

2. COMPOSITION/INFORMATION ON INGREDIENTS

	CHEMICAL NAME	Michael J. Reale	Pag	CAS NUMBER	WEIGHT %
Petroleum naphtha				64742-95-6	<60
Carbon Black				1333-86-4	<1
Titanium Dioxide				13463-67-7	<10
Proprietary non-hazardous ingredients				Mixture	Balance

See Section 15 of this MSDS for OSHA Regulatory Status

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Thick grey paint with petroleum odor.

Warning - Flammable liquid and vapor. Breathing vapors can cause dizziness, drowsiness, anesthesia, unconsciousness or other central nervous system effects. May cause skin and eye irritation. In case of fire, use foam, dry chemical, CO₂.

POTENTIAL HEALTH EFFECTS

PRIMARY ROUTE(S) OF ENTRY

Inhalation (breathing); eye and skin contact.

SYMPTOMS OF EXPOSURE

Inhalation: Breathing vapors can be irritating to the respiratory tract. High concentrations can result in dizziness, drowsiness, anesthesia, unconsciousness or other central nervous system effects.

Eye Contact: Vapors cause eye irritation. Liquid can cause slight irritation, but does not injure eye tissue.

Skin Contact: Can cause loss of natural oils, dermatitis. Symptoms may include redness, drying and cracking of skin.

Ingestion: Aspirating small amount of this material into the lungs as a result of ingestion or vomiting can cause mild to severe lung injury, possibly progressing to death.

CHRONIC EFFECTS

Frequent or prolonged contact may cause dermatitis.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Eye or skin disease, breathing or respiratory disorders. Intentional misuse by deliberately concentrating and inhaling vapors can be harmful or fatal.

REPORTED AS CARCINOGEN OR POTENTIAL CARCINOGEN

_ Not Applicable

_ National Toxicology Program (NTP)

_ OSHA

3 International Agency for Research on Cancer (IARC)
(See Section 11)

4. FIRST AID MEASURES

Inhalation: Remove from area to fresh air. If not breathing, clear airway and start mouth-to-mouth artificial respiration or use a bag-mask respirator. Get immediate medical attention. If victim is having trouble breathing, transport to medical care and, if available, give supplemental oxygen.

Eye contact: Hold eye open and flush slowly and gently with plenty of water for several minutes. Remove any contact lenses, and continue flushing for several more minutes. Seek medical attention if irritation develops and persists.

Skin Contact: Wash affected areas with plenty of water, and soap if available, for several minutes. Seek medical attention if irritation develops and persists.

Ingestion: **DO NOT** induce vomiting. Do not give anything by mouth to an unconscious or convulsing person. Get immediate medical attention.

NOTE TO PHYSICIAN

Chemical of exposure is petroleum naphtha. Small amounts aspirated during ingestion or vomiting can cause chemical pneumonitis.

5. FIRE FIGHTING MEASURES

Flash Point and Method..... 108 °F. (Petroleum naphtha)

GENERAL HAZARD

This product and its vapors are flammable. Explosive in a contained area. Vapors are heavier than air and may travel along the ground or may be moved by ventilation. Vapors may be ignited by open flames, sparks, heaters, smoking, electric motors or other sources of ignition distant from use.

EXTINGUISHING MEDIA

For small fires, use foam, CO₂, or dry chemical. For large fires, use water spray, fog, or foam.

SPECIAL FIREFIGHTING INSTRUCTIONS

Move containers from area if it can be done without risk.

FIREFIGHTING EQUIPMENT

As in any fire, wear NIOSH approved, positive-pressure self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Wear appropriate protective equipment (See Section 8). Remove all sources of ignition. Ventilate area.

7. HANDLING AND STORAGE

HANDLING

Wear appropriate protective equipment (See Section 8). Avoid breathing vapors. Keep container closed when not in use. Use with sufficient ventilation to keep area below established exposure levels. Wash thoroughly after handling.

Product and product vapors are flammable. Keep away from heat, sparks and flame.

STORAGE

Keep container tightly closed. Store in a flammable material area. Isolate from incompatible materials (see Section 10).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS

Use local exhaust or general dilution ventilation system.

PERSONAL PROTECTION

Respirator: Use NIOSH approved equipment only. For exposure above the established limits, use a respirator that has been selected by an industrial hygienist or other technically qualified person for the specific work conditions. If respirators are used, OSHA requires compliance with its Respiratory Protection standard (29 CFR 1910.134).

Eye Protection: Wear vented safety goggles.

Gloves: Wear chemical resistant gloves.

Clothing: Wear clothing that will protect the skin from exposure to this chemical. During emergency or while making repairs, wear clothing that will not allow this chemical to penetrate.

Other: Eye wash; safety shower.

EXPOSURE CONTROLS

COMPONENT	OSHA PEL		ACGIH TLV	
	TWA	STEL	TWA	STEL
Carbon Black*	3.5 mg/m ³	N/E	3.5 mg/m ³	N/E
Petroleum Naphtha	N/E	N/E	N/E	N/E
Trimethyl benzene	N/E	N/E	25 ppm	N/E
Xylene	100 ppm	N/E	100 ppm	150 ppm
Titanium Dioxide*	15 mg/m ³	N/E	10 mg/m ³	N/E

* Exposure limits are provided for information only. These chemicals are not in a respirable form in this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

State Thick paint
Color Grey
Odor Petroleum
Melting Point °F >300
Boiling Point N/E
Vapor Density Heavier than air
Reactivity in Water Negligible
Density 8.29 pounds/gallon
Water Solubility Negligible
pH NA

10. STABILITY AND REACTIVITY

REACTIVITY

Stable.

INCOMPATIBILITIES

Avoid contact with strong acids and oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS

May form oxides of carbon and various unidentified organic compounds.

CONDITIONS TO AVOID

Avoid temperatures above 120 °F.

11. TOXICOLOGICAL INFORMATION

For Product: No information for product

For Carbon Black: IARC – Group 2B (Possibly carcinogenic to humans)

For Titanium Dioxide

Trochimowicz, *et al.*, *J. Appl. Tox.*, **8**, 383-385 (1988).

Oral LD ₅₀ (rat)	>25 g/kg
Dermal LD ₅₀ (rabbit)	>10 g/kg
Inhalation LC ₅₀ (rat)	>6.82 mg/l (4 hr)

E.I. DuPont's Haskel Toxicology Laboratory conducted lifetime inhalation studies of respirable titanium dioxide at levels up to 250 mg/m³; no compound related clinical signs of toxicity were seen in the exposed animals. Slight pulmonary fibrosis was seen at 50 to 250 mg/m³ respirable titanium dioxide but not at 10 mg/m³. There was no evidence of cancer in animals exposed to 10 or 50 mg/m³ respirable titanium dioxide. Microscopic lung tumors were seen in 17 percent of the rats exposed to 250 mg/m³ respirable titanium dioxide. The lung tumors observed in the rats were different from common human lung cancers, relative to anatomic type and location, and occurred only at dust levels which overwhelmed the animals lung clearance mechanism and therefore, are of questionable biological relevance for man.

Results of a DuPont epidemiology study showed that employees who had been exposed to titanium dioxide pigments were at no greater risk of developing lung cancer than were employees who had not been exposed to titanium dioxide pigments. No pulmonary fibrosis was found in any of the employees and no associations were observed between titanium dioxide pigment exposure and chronic respiratory disease or lung abnormalities. Based on the results of this study, DuPont concluded that titanium dioxide pigment will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.

The National Cancer Institute (NCI) conducted a feed study in rats and mice in which either 25,000 or 50,000 parts per million titanium dioxide was given in their diet for two years. Under the condition of the NCI test, titanium dioxide did not cause cancer by the oral route.

Titanium dioxide has been classified by the American Congress of Governmental Industrial Hygienists (ACGIH) as an A4 Carcinogen - *Not Classifiable as a Human Carcinogen*. ("1999 TLVs and BEIs," p. 67). It has been classified by the International Agency for Research on Cancer (IARC) as Group 3 - *Not Classifiable as to Its Carcinogenicity to Humans*. (IARC Monograph 47, 1989).

12. ECOLOGICAL INFORMATION

For Product: No information for Product

13. DISPOSAL CONSIDERATIONS

RCRA Waste Code:.....D001.

Do not allow material to enter sewer systems. This product , including spill cleanups, is prohibited from land disposal without prior treatment; see 40 CFR 268.40 for guidance.. Observe all applicable federal, state, and local regulations.

14. TRANSPORT INFORMATION

DOT Hazard Class.....Not regulated when shipped by ground in non-bulk quantities.

15. REGULATORY INFORMATION

OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)

Hazardous Non-Hazardous

CERCLA/SUPERFUND (40 CFR 117, 302)

Chemical Name	RQ (lbs)/(kg)
Xylene	100 lb. / 45.4 kg

SARA EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355)

Chemical Name	TPQ (lbs)	RQ (lbs)
N/A	N/A	N/A

SARA HAZARD CATEGORIES (40 CFR 370)

Acute Chronic Fire Pressure Reactive None

SARA TOXIC CHEMICALS (40 CFR 372)

Chemical Name	CAS Number	%
1,2,4-Trimethylbenzene	95-63-6	<25
Xylene	1330-20-7	<5

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (CPR Section (33))

This product has been classified according to the hazard criteria of the Controlled Products Regulations, and the MSDS contains all required information.

Controlled Product; Classification: B2, D2A, D2B Not a Controlled Product

INVENTORY STATUS

The ingredients of this chemical are listed on the US TSCA Chemical Substance Inventory and the Canadian Domestic Substances List.

TOXIC SUBSTANCES CONTROL ACT

No specific regulations apply.

STATE REGULATIONS

California Proposition 65Traces of Formaldehyde
Florida Hazardous Substance ListXylene
Massachusetts Right to Know ListXylene, 1,2,4-trimethylbenzene, Carbon Black, Titanium Dioxide
Minnesota Hazardous Substance List.....Xylene, Carbon Black, Titanium Dioxide
New Jersey Right to Know List.....Xylene (SN 2014), 1,2,4-trimethylbenzene (SN 2716), Carbon Black (SN 0342), Titanium Dioxide (SN 1861)
Pennsylvania Right to Know List.....Xylene, 1,2,4-Trimethylbenzene, Carbon Black, Titanium Dioxide
Rhode Island Hazardous Substance ListXylene, Carbon Black, Titanium Dioxide

16. OTHER INFORMATION

ABBREVIATIONS

C - Ceiling limit

LC_{Lo} - The lowest concentration of a substance in air that will kill a test animal within a certain exposure period.

LC₅₀ - The concentration of a substance in air that will kill 50% of test animals within a certain exposure period.

LD₅₀ - The dose that causes death in 50% of test animals.

N/A - Not applicable

N/D - Not determined

N/E - Not established

N/K - Not known

NAERG - North American Emergency Response Guidebook

RQ - Reportable Quantity

TPQ - Threshold Planning Quantity

PREPARATION INFORMATION

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