Manus Products, Inc.

MANUS-BOND 76-AM; (White, gray, black) High Performance Elastomeric Self-Leveling Adhesive/Sealant

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTIFICATION

Brand Name..... MANUS-BOND 76-AM; – High Performance Self-Leveling Elastomeric Adhesive / Sealant
Product Use ..... Adhesive / Sealant
Product Identification Number..... N/A

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	CAS NUMBER	WEIGHT %
Calcium Carbonate	1317-65-3	<70
Proprietary Polymers	--	<30
Titanium Dioxide	13463-67-7	<10
Carbon Black (gray and black only)	1333-86-4	<1

See Section 15 of this MSDS for OSHA Regulatory Status

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Heavy paste with mild odor; various colors: white, grey and black.
Can cause skin and eye irritation.

Combustible Material (will burn). In case of fire, use foam, dry chemical, CO_2.

POTENTIAL HEALTH EFFECTS

PRIMARY ROUTE(S) OF ENTRY

Inhalation (breathing); eye and skin contact.

CAUTION! Can cause skin and eye irritation;.

SYMPTOMS OF EXPOSURE

Inhalation: Breathing large amounts of vapor may be harmful.

Eye Contact: Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin Contact: Can cause skin irritation. Symptoms may include redness and burning of skin.

Ingestion: Swallowing large amounts may be harmful.

CHRONIC EFFECTS

Over exposure to a component of this material has been suggested as a cause of liver abnormalities in laboratory animals..

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Eye or skin disease.

REPORTED AS CARCINOGEN OR POTENTIAL CARCINOGEN

___ Not Applicable
___ National Toxicology Program (NTP)
__ OSHA
X_ 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: Immediately rinse eyes with water. Remove any contact lenses. Hold eyelids apart to ensure rinsing of the entire surface of the eyes and lids with water. Continue flushing eyes with running water for at least 15 minutes. Get medical attention if irritation develops.

Skin Contact: Wash affected areas with large amounts of running water, and soap if available, for 15 minutes. Remove contaminated clothing and shoes. Wash clothing and decontaminate shoes before reuse. Get 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 - None

5. FIRE FIGHTING MEASURES

Flash Point and Method..... >200 °F.

GENERAL HAZARD

This product is combustible.

EXTINGUISHING MEDIA

For small fires, use foam, CO_2, 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). Ventilate area. Observe all local, state and federal regulations.

7. HANDLING AND STORAGE

HANDLING

Wear appropriate protective equipment (See Section 8). Avoid contact with eyes, skin and clothes. 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 is combustible.

STORAGE

Keep container tightly closed. Isolate from incompatible materials (see Sect. 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 exposure limit, 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 program.

Eye Protection: Wear vented safety goggles or safety glasses.

Gloves: Nitrile 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.

EXPOSURE CONTROLS

COMPONENT	OSHA PEL		ACGIH TLV	
	TWA	STEL	TWA	STEL
Titanium Dioxide*	15 mg/m^3	N/E	10 mg/m^3	N/E
Carbon Black*	3.5 mg/m^3	N/E	3.5 mg/m^3	N/E
Calcium Carbonate*	15 mg/m^3	N/E	10 mg/m^3	N/E

- Exposure limits are provided for information only. This chemical is not in a respirable form in this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

State	Paste (S.L.)
Color	N/A
Odor	Mild
Melting Point °F	N/E
Boiling Point	N/E
pH	NA
Vapor Density	N/E
Reactivity in Water	Incompatible
Specific Gravity	~1.6-1.7
Water Solubility	Slightly soluble

10. STABILITY AND REACTIVITY

REACTIVITY

Stable.

INCOMPATIBILITIES

Avoid contact with 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 Carbon Black: IARC – Group 2B (Possibly carcinogenic to humans)

For Product: Not established.

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/m^3; no compound related clinical signs of toxicity were seen in the exposed animals. Slight pulmonary fibrosis was seen at 50 to 250 mg/m^3 respirable titanium dioxide but not at 10 mg/m^3. There was no evidence of cancer in animals exposed to 10 or 50 mg/m^3 respirable titanium dioxide. Microscopic lung tumors were seen in 17 percent of the rats exposed to 250 mg/m^3 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: ..... Not established.

13. DISPOSAL CONSIDERATIONS

RCRA Waste Code:.....Not Regulated. Observe all applicable federal, state, and local regulations.

14. TRANSPORT INFORMATION

DOT Proper Shipping Name .....Not regulated.

15. REGULATORY INFORMATION

OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)

X Hazardous _ Non-Hazardous

CERCLA/SUPERFUND (40 CFR 117, 302)

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

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)

X Acute _ Chronic _ Fire _ Pressure _ Reactive _ None

SARA TOXIC CHEMICALS (40 CFR 372)

Chemical Name	CAS Number	%
N/A	N/A	N/A

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.

X Controlled Product; Classification: 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 65……Crystalline Silica – Warning – This chemical is known to the State of California to cause cancer.
Massachusetts Right to Know List.....Carbon Black, Titanium Dioxide
Minnesota Hazardous Substance List.....Carbon Black, Titanium Dioxide
New Jersey Right to Know List.....Carbon Black (SN 0342), Titanium Dioxide (SN 1861)
Pennsylvania Right to Know List.....Carbon Black, Titanium Dioxide
Rhode Island Hazardous Substance List .....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.
LC_{50} - The concentration of a substance in air that will kill 50% of test animals within a certain exposure period.
LD_{50} - 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

Prepared by: ..... Manus Chemical Safety and Health Department
MSDS No.: ..... MANUS-BOND 76-AM; **(White, gray, black)**
Date Prepared:……August 2012
Supersedes: …… December, 2009