Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name
MANUS-BOND 75-AM N33-1 FAST CURE
Product Use
Adhesives. Sealant.
Restrictions on Use
None known.
Details of the supplier of the safety data sheet
Manus Products, Inc.
866 Industrial Blvd. West
Waconia, MN 55387
Phone: (952) 442-3323
Emergency Phone #: (800) 424-9300

Section 2 - HAZARDS IDENTIFICATION

Classification in accordance with paragraph (d) of 29 CFR 1910.1200.
Acute Toxicity - Oral - Category 4
Serious Eye Damage/Eye Irritation - Category 2A
Carcinogenicity - Category 1A
Reproductive Toxicity - Category 1B
Specific Target Organ Toxicity - Single Exposure - Category 1 (central nervous system)
Specific Target Organ Toxicity - Repeated Exposure - Category 1 (respiratory system)
Specific Target Organ Toxicity - Repeated Exposure - Category 2 (bladder)
GHS Label Elements
Symbol(s)

Signal Word
Danger
Hazard Statement(s)
Harmful if swallowed.
Causes serious eye irritation.
May cause cancer.
May damage fertility or the unborn child.
Causes damage to organs.
Causes damage to organs through prolonged or repeated exposure.
May cause damage to organs through prolonged or repeated exposure.
Precautionary Statement(s)
Prevention
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear eye protection/face protection.
Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.

Response

If exposed: Call a POISON CENTER or doctor/physician.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
Rinse mouth.
Get medical advice/attention if you feel unwell.
Specific treatment (see label).

Storage

Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Statement(s) of Unknown Acute Toxicity

Oral 71.91% of the mixture consists of ingredient(s) of unknown acute toxicity.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
1317-65-3	Calcium carbonate	30-60
471-34-1	Carbonic acid, calcium salt (1:1)	15-40
13463-67-7	Titanium dioxide (*not in black)	1-5
2768-02-7	Organosilane	1-5
818-08-6	Dibutyltin oxide	0.1-1
28553-12-0	Diisononyl phthalate	0.1-2
1333-86-4	Carbon black (* not in white)	0.05-<0.1

Section 4 - FIRST AID MEASURES

Inhalation

IF INHALED: If breathing is difficult, remove person to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell.

Skin

IF ON SKIN Wash with plenty of soap and water If skin irritation or rash occurs: Get medical advice/attention Take off contaminated clothing and wash before reuse

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician Do NOT induce vomiting

Most Important Symptoms/Effects

Acute

Harmful if swallowed. Causes serious eye irritation.

Delayed

May cause cancer. May damage fertility or the unborn child. Causes damage to organs. Causes damage to organs through prolonged or repeated exposure. May cause damage to organs through prolonged or repeated exposure.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Use carbon dioxide, regular dry chemical, regular foam or water.

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

Special Hazards Arising from the Chemical

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Hazardous Combustion Products

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Advice for firefighters

Heating may cause an explosion. Containers may rupture or explode.

Fire Fighting Measures

Keep away from sources of ignition - No smoking Move material from fire area if it can be done without risk Avoid inhalation of vapors or combustion by-products. Dike for later disposal. Stay upwind and keep out of low areas.

Special Protective Equipment and Precautions for Firefighters

A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8.

Methods and Materials for Containment and Cleaning Up

Keep unnecessary people away, isolate hazard area and deny entry. In case of spillage, stop the flow of material and block any potential routes to water systems. Only personnel trained for the hazards of this material should perform clean up and disposal.

Environmental Precautions

Do not flush into sanitary sewer systems, drains or surface water. Avoid release to the environment.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Do not handle until all safety precautions have been read and understood. Keep away from all ignition sources. Avoid contact with eyes and skin. Do not eat, drink or smoke when using this product. Always wear recommended personal protective equipment. Wear personal protective clothing and equipment, see Section 8. Take precautionary measures against static discharge.

Conditions for Safe Storage, Including any Incompatibilities

Store locked up.

Store in a cool dry place. Store in a well-ventilated area. Keep separated from incompatible substances. Keep container tightly closed. Empty containers may contain product residue. Store and handle in accordance with all current regulations and standards. Avoid contact with temperatures above 120 C.

Incompatible Materials

Strong oxidizer. strong acids.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

Calcium carbonate	**1317-65-3**
NIOSH:	10 mg/m3 TWA total dust ; 5 mg/m3 TWA respirable dust
OSHA (US):	15 mg/m3 TWA total dust ; 5 mg/m3 TWA respirable fraction
Mexico:	10 mg/m3 TWA VLE-PPT
	20 mg/m3 STEL [PPT-CT]
Carbonic acid, calcium salt (1:1)	**471-34-1**
NIOSH:	10 mg/m3 TWA total dust ; 5 mg/m3 TWA respirable dust
Titanium dioxide	**13463-67-7**
ACGIH:	10 mg/m3 TWA
NIOSH:	2.4 mg/m3 TWA (CIB 63) fine ; 0.3 mg/m3 TWA (CIB 63) ultrafine, including engineered nanoscale
	5000 mg/m3 IDLH
OSHA (US):	15 mg/m3 TWA total dust
Mexico:	10 mg/m3 TWA VLE-PPT as Ti
	20 mg/m3 STEL [PPT-CT] as Ti
Carbon black	**1333-86-4**
ACGIH:	3 mg/m3 TWA inhalable particulate matter
NIOSH:	3.5 mg/m3 TWA ; 0.1 mg/m3 TWA (Carbon black in presence of Polycyclic aromatic hydrocarbons) as PAH
	1750 mg/m3 IDLH
OSHA (US):	3.5 mg/m3 TWA
Mexico:	3.5 mg/m3 TWA VLE-PPT
	7 mg/m3 STEL [PPT-CT]

ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)
There are no biological limit values for any of this product's components.

Engineering Controls
Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Provide local exhaust or process enclosure ventilation system.

Individual Protection Measures, such as Personal Protective Equipment
Eye/face protection
Wear splash resistant safety goggles with a faceshield.
Respiratory Protection
Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.
Glove Recommendations
Wear appropriate chemical resistant gloves.
Protective Materials
Wear appropriate chemical resistant clothing.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	paste	**Physical State**	solid
Odor	mild	**Color**	black , white , gray
Odor Threshold	Not available	**pH**	Not available
Melting Point	Not available	**Boiling Point**	Not available
Boiling Point Range	Not available	**Freezing point**	Not available
Evaporation Rate	Not available	**Flammability (solid, gas)**	Not available
Autoignition Temperature	Not available	**Flash Point**	93.3 °C (>200 °F)
Lower Explosive Limit	Not available	**Decomposition temperature**	Not available
Upper Explosive Limit	Not available	**Vapor Pressure**	Not available
Vapor Density (air=1)	Not available	**Specific Gravity (water=1)**	1.3 - 1.7
Water Solubility	(Slightly soluble)	**Partition coefficient: n-octanol/water**	Not available
Viscosity	Not available	**Kinematic viscosity**	Not available
Solubility (Other)	Not available	**Density**	Not available
Physical Form	paste	**Molecular Weight**	Not available

Section 10 - STABILITY AND REACTIVITY

Reactivity
No reactivity hazard is expected.
Chemical Stability
Stable at normal temperatures and pressure.
Possibility of Hazardous Reactions
Will not polymerize.
Conditions to Avoid
Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials. Avoid contact with temperatures above 120 C.

Incompatible Materials
Strong acids. Strong oxidizer.
Hazardous decomposition products
Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Section 11 - TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure
Inhalation
May be harmful if inhaled.
Skin Contact
May cause skin irritation.
Eye Contact
Causes serious eye irritation.
Ingestion
Harmful if swallowed.
Acute and Chronic Toxicity
Component Analysis - LD50/LC50
The components of this material have been reviewed in various sources and the following selected endpoints are published:
Carbonic acid, calcium salt (1:1) (471-34-1)
Oral LD50 Rat 6450 mg/kg
Titanium dioxide (13463-67-7)
Oral LD50 Rat >10000 mg/kg
Organosilane (2768-02-7)
Oral LD50 Rat 7340 µL/kg
Dibutyltin oxide (818-08-6)
Oral LD50 Rat 44.9 mg/kg
Diisononyl phthalate (28553-12-0)
Oral LD50 Rat >9750 mg/kg
Inhalation LC50 Rat >4.4 mg/L 4 h (no deaths occurred)
Carbon black (1333-86-4)
Oral LD50 Rat >15400 mg/kg
Product Toxicity Data
Acute Toxicity Estimate

Oral	1261.241 mg/kg

Immediate Effects
Harmful if swallowed. Causes serious eye irritation.
Delayed Effects
May cause cancer. May damage fertility or the unborn child. Causes damage to organs. Causes damage to organs through prolonged or repeated exposure. May cause damage to organs through prolonged or repeated exposure.
Irritation/Corrosivity Data
Causes serious eye irritation.
Respiratory Sensitization
No information on significant adverse effects.
Dermal Sensitization
No information on significant adverse effects.
Component Carcinogenicity

Titanium dioxide	**13463-67-7**
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
IARC:	Monograph 93 [2010] ; Monograph 47 [1989] (Group 2B (possibly carcinogenic to humans))
DFG:	Category 3A (could be carcinogenic for man ;inhalable fraction with the exception of ultra small particles)
OSHA:	Present
NIOSH:	potential occupational carcinogen
Carbon black	**1333-86-4**
ACGIH:	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
IARC:	Monograph 93 [2010] ; Monograph 65 [1996] (Group 2B (possibly carcinogenic to humans))
DFG:	Category 3B (could be carcinogenic for man ;inhalable fraction)
OSHA:	Present
NIOSH:	potential occupational carcinogen

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.

Germ Cell Mutagenicity
No information on significant adverse effects.

Tumorigenic Data
No information on significant adverse effects.

Reproductive Toxicity
May damage fertility or the unborn child.

Specific Target Organ Toxicity - Single Exposure
Central nervous system.

Specific Target Organ Toxicity - Repeated Exposure
Respiratory system. Bladder.

Aspiration hazard
No information on significant adverse effects.

Medical Conditions Aggravated by Exposure
No data available.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity
May cause long lasting harmful effects to aquatic life.

Component Analysis - Aquatic Toxicity

Diisononyl phthalate	**28553-12-0**
Fish:	LC50 96 h Brachydanio rerio >100 mg/L [semi-static]; LC50 96 h Lepomis macrochirus >0.14 mg/L [flow-through]; LC50 96 h Lepomis macrochirus >0.17 mg/L [static]; LC50 96 h Pimephales promelas >0.19 mg/L [flow-through]; LC50 96 h Pimephales promelas >0.14 mg/L [static]
Algae:	EC50 72 h Desmodesmus subspicatus >500 mg/L IUCLID ; EC50 96 h Pseudokirchneriella subcapitata >1.8 mg/L [static] EPA
Invertebrate:	EC50 48 h Daphnia magna >500 mg/L IUCLID ; EC50 48 h Daphnia magna >0.06 mg/L [Static] EPA

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods
Dispose in accordance with all applicable federal, state/regional and local laws and regulations.
Component Waste Numbers
The U.S. EPA has not published waste numbers for this product's components.

Section 14 - TRANSPORT INFORMATION

US DOT Information:
Further information: Not regulated as dangerous goods

IATA Information:
Further information: Not regulated as dangerous goods

ICAO Information:
Further information: Not regulated as dangerous goods

IMDG Information:
Further information: Not regulated as dangerous goods
International Bulk Chemical Code
This material contains one or more of the following chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

Titanium dioxide	**13463-67-7**
IBC Code:	Category Z (slurry)

Section 15 - REGULATORY INFORMATION

U.S. Federal Regulations
None of this product's components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.
SARA Section 311/312 (40 CFR 370 Subparts B and C) reporting categories
Carcinogenicity; Acute toxicity; Reproductive Toxicity; Serious Eye Damage/Eye Irritation; Specific Target Organ Toxicity

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Calcium carbonate	**1317-65-3**	No	Yes	Yes	Yes	Yes
Titanium dioxide	**13463-67-7**	No	Yes	Yes	Yes	Yes
Carbon black	**1333-86-4**	Yes	Yes	Yes	Yes	Yes

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

WARNING

This product can expose you to chemicals including Titanium dioxide, Diisononyl phthalate, Carbon black , which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Titanium dioxide	**13463-67-7**
Carc:	carcinogen , 9/2/2011 (airborne, unbound particles of respirable size)
Diisononyl phthalate	**28553-12-0**
Carc:	carcinogen , 12/20/2013
Carbon black	**1333-86-4**
Carc:	carcinogen , 2/21/2003 (airborne, unbound particles of respirable size)

Canada Regulations

Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

Dibutyltin oxide	**818-08-6**
	1 %
Carbon black	**1333-86-4**
	1 %

Component Analysis - Inventory

Calcium carbonate (1317-65-3)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)

Yes	NSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

Carbonic acid, calcium salt (1:1) (471-34-1)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

Titanium dioxide (13463-67-7)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

Organosilane (2768-02-7)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	Yes

Dibutyltin oxide (818-08-6)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	Yes

Diisononyl phthalate (28553-12-0)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

Carbon black (1333-86-4)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

Section 16 - OTHER INFORMATION

NFPA Ratings
Health: 2 Fire: 1 Reactivity: 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Summary of Changes
Section 2 - HAZARDS IDENTIFICATION. Section 11 - TOXICOLOGICAL INFORMATION. Section 15 - REGULATORY INFORMATION. California Safe Drinking Water and Toxic Enforcement Act (Proposition 65).

Preparation Date
8/10/2018

Key / Legend
ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania*; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CFR - Code of Federal Regulations (US); CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC – European Commission; EEC - European Economic Community; EIN - European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; F - Background (for Venezuela Biological Exposure Indices); IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID - International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition coefficient; KR KECI Annex 1 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL); KR KECI Annex 2 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL) , KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX – Mexico; Ne- Non-specific; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; Nq - Non-quantitative; NSL – Non-Domestic Substance List (Canada); NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL- Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; Sc - Semi-quantitative; STEL - Short-term Exposure Limit; TCCA – Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW – Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); VN (Draft) - Vietnam (Draft); WHMIS - Workplace Hazardous Materials Information System (Canada).

Other Information

Disclaimer:

Supplier gives no warranty whatsoever, including the warranties of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser shall determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental, consequential or any other damages arising out of the use or misuse of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights.