

Safety Data Sheet

Material Name: MANUS-BOND 27-A Clear

SDS ID: Preliminary

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

MANUS-BOND 27-A Clear Sealant

Product Use

Thermoplastic Multipurpose Exterior Durable Clear 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.

Flammable Liquids, Category 3

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 3 (respiratory system)

Specific Target Organ Toxicity - Repeated Exposure - Category 2 (lungs, nervous system, and respiratory system)

Hazardous to the Aquatic Environment - Acute Hazard, Category 2

Hazardous to the Aquatic Environment - Chronic Hazard, Category 2

GHS Label Elements

Symbol(s)



Signal Word

Danger

Hazard Statement(s)

Flammable liquid and vapor

Causes skin irritation.

Causes serious eye irritation.

May damage fertility or the unborn child

Causes damage to the central nervous system, kidneys, liver, and respiratory system.

May cause respiratory irritation.

Causes damage to lungs, nervous system, and respiratory system through prolonged or repeated exposure.

Toxic to aquatic life with long lasting effects.

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Precautionary Statement(s)

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flame, and hot surfaces - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe gas, fumes, vapor, or spray. Do not eat, drink, or smoke when using this product. Wear protective gloves/clothing and eye/face protection. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment.

Response

In case of fire: Use appropriate media for extinction. IF exposed or concerned: Get medical advice/attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. 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. Collect spillage.

Storage

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Disposal

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

Statement(s) of Unknown Acute Toxicity

Not Available

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
1330-20-7	Xylenes (o-, m-, p- isomers)	25-35
8042-47-5	Mineral Oil	5-10
Mixture	Proprietary Hydrocarbon Resins	10-30
Mixture	Proprietary Elastomers	10-30

Section 4 - FIRST AID MEASURES

Description of Necessary 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 Contact

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Remove contaminated clothing, jewelry, and shoes immediately. Wash contaminated clothing before reuse.

Eye Contact

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 a large amount is swallowed, get immediate medical attention.

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Most Important Symptoms/Effects

Acute

respiratory tract irritation skin irritation eye irritation central nervous system damage kidney damage liver damage respiratory system damage

Delayed

lung damage nervous system damage respiratory system damage reproductive effects

Indication of Immediate Medical Attention and Special Treatment Needed, If Needed

Treat symptomatically and supportively.

Section 5 - FIRE FIGHTING MEASURES

Suitable Extinguishing Media

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

Unsuitable Extinguishing Media

None known.

Special Hazards Arising from the Chemical

Hazardous Combustion Products

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

Special Protective Equipment and Precautions for Firefighters

Flammable liquid and vapor.

Fire Fighting Measures

Move material from the fire area if it can be done without risk. Cool containers with water. Avoid inhalation of vapors or combustion by-products. Use extinguishing agents appropriate for surrounding fires. Dike for later disposal. Stay upwind and keep out of low areas.

Protective Equipment and Precautions for Firefighters

Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing. Firefighters should avoid inhaling any combustion products.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8. Keep unnecessary people away, isolate hazard area and deny entry. Only personnel trained for the hazards of this material should perform clean up and disposal. Avoid release to the environment.

Methods and Materials for Containment and Cleaning Up

Eliminate all ignition sources if safe to do so. Ventilate the area. Stop leaks if possible, without personal risk. Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Avoid release to the environment.

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

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Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, and flame. Take precautionary measures against static discharge. Do not breathe vapor or mist. Avoid contact with skin and eyes. 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. Wash thoroughly after handling.

Conditions for Safe Storage, including Incompatibilities

Store and handle in accordance with all current regulations and standards. Store in a well-ventilated area. Keep container tightly closed. Keep cool. Keep separated from incompatible substances.

Incompatibilities: strong oxidizing materials

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

Xylenes (o-, m-, p-isomers)	1330-27-7
ACGIH:	100 ppm TWA; 150 ppm STEL
OSHA (US):	100 ppm TWA; 435 mg/m ³ TWA
Mexico:	100 ppm TWA LMPE-PPT; 435 mg/m ³ TWA LMPE-PPT
	150 ppm STEL [LMPE-CT]; 655 mg/m ³ STEL [LMPE-CT]
Mineral Oil	8042-47-5
ACGIH:	435 mg/m ³ 8 hours TWA Inhalable fraction
OSHA (US):	5 mg/m³ 8 hours TWA
Proprietary Elastomers	MIXTURE
TWA	3 mg/m ³ Respirable Fraction

ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

There are no biological limit values for any of this product's components.

Engineering Controls

Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

Individual Protection Measures, such as Personal Protective Equipment

Eyes/Face Protection

Wear splash resistant safety goggles with a faceshield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin Protection

Wear appropriate chemical resistant clothing.

Glove Recommendations

Wear appropriate chemical resistant gloves.

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Respiratory Protection

Use an approved respirator if exposure limits are exceeded or if irritation develops or persists. **Protective Materials**

Wear appropriate chemical resistant clothing.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	paste	Physical State	Solid Paste
Odor	mild hydrocarbon	Color	Clear
Odor Threshold	Not available	pH	Not available
Melting Point	Not available	Boiling Point	138-142 °C (Xylene)
Boiling Point Range	Not available	Freezing point	Not available
Evaporation Rate	Not available	Flammability (solid, gas)	Not available
Autoignition Temperature	Not available	Flash Point	25 °C (Xylene)
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)	0.9 – 1.0
Water Solubility	(Slightly soluble)	Partition coefficient: n-octanol/water	Not available
Viscosity	~850,000 Cps	Kinematic viscosity	Not available
Solubility (Other)	Not available	VOC	320 g/l EPA method 24
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

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

Section 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Xylenes (o-, m-, p- isomers) (1330-20-7)

Dermal LD50 Rabbit >4350 mg/kg; Inhalation LC50 Rat 29.08 mg/L 4 h; Oral LD50 Rat 3500 mg/kg

Mineral Oil (8042-47-5)

Oral LD50 Rat >5000 mg/kg

Information on Likely Routes of Exposure

Inhalation

May be harmful if inhaled. May cause respiratory irritation. May cause irritation and central nervous system effects including nausea, headache, dizziness, fatigue, drowsiness or unconsciousness.

Ingestion

May be harmful if swallowed.

Skin Contact

May cause irritation of the skin. May cause irritation, redness, itching and burning.

Eye Contact

May cause irritation of the eyes. Contact may cause tearing, redness, a stinging or burning feeling, swelling, and blurred vision.

Immediate Effects

respiratory tract irritation, skin irritation, eye irritation, central nervous system damage, kidney damage, liver damage, respiratory system damage

Delayed Effects

lung damage, nervous system damage, respiratory system damage

Medical Conditions Aggravated by Exposure

skin disorders, eye disorders

Irritation/Corrosivity Data

Causes skin, eye, and respiratory irritation.

Respiratory Sensitization

No information is available for the product.

Dermal Sensitization

No information is available for the product.

Germ Cell Mutagenicity

No information is available for the product.

Component Carcinogenicity

Xylenes (o-, m-, p- isomers) (1330-20-7)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))

Reproductive Toxicity

No information is available for the product.

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Specific Target Organ Toxicity - Single Exposure

central nervous system, kidneys, liver, respiratory system

Specific Target Organ Toxicity - Repeated Exposure

lungs

Aspiration Hazard

No information available for the product.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity

May cause long lasting harmful effects to aquatic life.

Component Analysis - Aquatic Toxicity

Xylenes (o-, m-, p- isomers)	(1330-20-7)
Fish:	96 Hr LC50 Pimephales promelas: 13.4 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 2.661 - 4.093 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 13.5 - 17.3 mg/L; 96 Hr LC50 Lepomis macrochirus: 13.1 - 16.5 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 19 mg/L; 96 Hr LC50 Lepomis macrochirus: 7.711 - 9.591 mg/L [static]; 96 Hr LC50 Pimephales promelas: 23.53 - 29.97 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 780 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: >780 mg/L; 96 Hr LC50 Poecilia reticulata: 30.26 - 40.75 mg/L [static]
Algae:	NA
Invertebrate:	48 Hr EC50 water flea: 3.82 mg/L; 48 Hr LC50 Gammarus lacustris: 0.6 mg/L

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: Shipping Name: ADHESIVES containing flammable liquid, Mixture (Contains: Xylene)

UN/NA #: UN1133 Hazard Class: 3 Packing Group: III

Required Label(s): 3

For product transported in 10.1 OZ cartridges

Shipping Name: LIMITED QUANTITY

Required Label(s): LIMITED QUANTITY

TDG Information

Shipping Name: ADHESIVES containing flammable liquid, Mixture (Contains: Xylene)

UN #: UN1133 Hazard Class: 3 Packing Group: III

Required Label(s): 3

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Section 15 - REGULATORY INFORMATION

U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Xylenes (o-, m-, p- isomers) (1330-20-7)

SARA 313: 1.0 % de minimis concentration

CERCLA: 100 lb final RQ; 45.4 kg final RQ

SARA Section 311/312 (40 CFR 370 Subparts B and C) reporting categories

Acute Health: Yes Chronic Health: Yes Fire: Yes Pressure: No Reactive: No

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
XYLENE	1330-20-7	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.

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

Component Analysis - Inventory

Component	CAS	US	CA	EU	AU	PH	JP	KR	CN	NZ
Xylenes (o-, m-, p- isomers)	1330-20-7	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes

Section 16 - OTHER INFORMATION

NFPA Ratings

Health: 2 Fire: 3 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).

1/27/20

1.1 Section 14 – Added information related to Limited Quantity

Preparation Date

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7/20/23

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 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.