

Safety Data Sheet

Issue Date: 22-Oct-2011

Revision Date: 11-Feb-2014

Version 1

1. IDENTIFICATION

Product Identifier

Product Name Inter-Mix 90 Hybrid Panel Bonder (Hardener)

Other means of identification

SDS # IES-8422H

Other Information Product #8422 and #8423.

Recommended use of the chemical and restrictions on use

Recommended Use Structural adhesive hardener (use with base).

Details of the supplier of the safety data sheet

Supplier Address

International Epoxies & Sealers
30241 Commerce Drive
San Antonio, FL 33576

Emergency Telephone Number

Company Phone Number 1-800-451-7206

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Tan viscous liquid

Physical State Liquid

Odor slight amine

Classification

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Germ cell mutagenicity	Category 1B
Reproductive toxicity	Category 2

Hazards Not Otherwise Classified (HNOC)

May be harmful in contact with skin

Signal Word

Danger

Hazard Statements

Harmful if swallowed

Causes skin irritation

Causes serious eye damage

May cause an allergic skin reaction

May cause genetic defects

Suspected of damaging fertility or the unborn child

**Precautionary Statements - Prevention**

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves

Precautionary Statements - Response

If exposed or concerned: 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
Immediately call a poison center or doctor/physician
IF ON SKIN: Wash with plenty of soap and water
Take off contaminated clothing and wash it before reuse
Get immediate medical advice/attention
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Rinse mouth

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards

Toxic to aquatic life with long lasting effects

Unknown Acute Toxicity

54.5% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
9,12-Octadecadienoic Acid (Z,Z), dimer, polymer	68541-13-9	15-40
Amine Terminated Liquid Copolymer	68683-29-4	5-25
Fused Silica	60676-86-0	4-10
3,3-[Oxybis(2,1-ethane-diyloxy)]bis-1-propylamine	4246-51-9	2-8
Benzyl alcohol	100-51-6	2-8
Synthetic Amorphous Silica	67762-90-7	1-5
Imidazole	288-32-4	1-5
Bisphenol A	80-05-7	1-5
N-Aminoethyl piperazine	140-31-8	1-5
Nonylphenol	25154-52-3	1-5
Triethylene tetramine	112-24-3	<1
Stoddard solvent	8052-41-3	<0.3
Benzyl dimethylamine	103-83-3	<1

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

General Advice	If exposed or concerned: Get medical advice/attention.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek immediate medical attention/advice.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing. Wash contaminated clothing before reuse. Get medical attention immediately.
Inhalation	Remove to fresh air. Get medical attention immediately.
Ingestion	Rinse mouth. Do not induce vomiting. Give two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Most important symptoms and effects

Symptoms	Symptoms of eye contact may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision, or complete loss of vision. Symptoms of skin contact may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction. Symptoms of inhalation may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Symptoms of ingestion may include severe mouth, throat, and abdominal pain; nausea, vomiting, and diarrhea; blood in the feces and/or vomitus may also be seen.
-----------------	--

Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
---------------------------	------------------------

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use fire extinguishers with class B extinguishing agents. Dry chemical. Carbon dioxide (CO₂).

Unsuitable Extinguishing Media Water or foam may cause frothing.

Specific Hazards Arising from the Chemical

No specific fire or explosion hazard.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment as required.

Environmental Precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Contain and collect with an inert absorbent and place into an appropriate container for disposal. Spills and releases may have to be reported to Federal and/or local authorities. See section 15. Clean up residue with an appropriate organic solvent.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protection recommended in Section 8. Wash thoroughly after handling. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Carefully vent any internal pressure before removing closure. Avoid contact with skin and eyes. Avoid breathing dust created by cutting, sanding, grinding, or machining.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children. Store away from incompatible materials. Protect from direct sunlight. Keep away from heat.

Incompatible Materials Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Fused Silica 60676-86-0	-	(vacated) TWA: 0.1 mg/m ³ respirable dust : (80)/(% SiO ₂) mg/m ³ TWA TWA: 20 mppcf	-
Stoddard solvent 8052-41-3	TWA: 100 ppm	TWA: 500 ppm TWA: 2900 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m ³	IDLH: 20000 mg/m ³ Ceiling: 1800 mg/m ³ 15 min TWA: 350 mg/m ³

Appropriate engineering controls

Engineering Controls Use a local exhaust or general dilution ventilation system.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Full-face shield. Safety glasses with side-shields. Indirect vented goggles.

Skin and Body Protection Consult the glove manufacturer for the most appropriate glove material. Use body protection appropriate for task. Nitrile or Neoprene gloves may afford adequate skin protection.

Respiratory Protection Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half face-piece or full-face air-purifying respirator with P95 particulate filters.

General Hygiene Considerations Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Wash contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Odor	slight amine
Appearance	Tan viscous liquid	Odor Threshold	Not determined
Color	Tan		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not applicable	
Melting Point/Freezing Point	Not applicable	
Boiling Point/Boiling Range	>= 110 °C / 230 °F	
Flash Point	> 93 °C / 200 °F	CC (closed cup)
Evaporation Rate	< 1	
Flammability (Solid, Gas)	n/a-liquid	
Upper Flammability Limits	No data available	
Lower Flammability Limit	No data available	
Vapor Pressure	No data available	
Vapor Density	No data available	
Specific Gravity	~1.07	(1=Water)
Water Solubility	Negligible	
Solubility in other solvents	Not determined	
Partition Coefficient	No data available	
Auto-ignition Temperature	No data available	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	>400 centistokes	
Explosive Properties	Not determined	

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Oxidizing Properties	Not determined	
VOC Content	No data available	
Density	8.94 lb/gal	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Causes serious eye damage.
Skin Contact	May cause an allergic skin reaction. Causes skin irritation. May be harmful in contact with skin.
Inhalation	Avoid breathing vapors or mists.
Ingestion	Harmful if swallowed.

Component Information

<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Inhalation LC50</u>
2,4,6-tri(dimethylaminomethyl)phenol 90-72-2	= 1000 mg/kg (Rat)	= 1280 mg/kg (Rat)	-
3,3-[Oxybis(2,1-ethane-diyloxy)]bis-1-propylamine 4246-51-9	= 4290 µL/kg (Rat)	= 2500 µL/kg (Rabbit)	-
Benzyl alcohol 100-51-6	= 1230 mg/kg (Rat)	= 2000 mg/kg (Rabbit)	= 8.8 mg/L (Rat) 4 h
Imidazole 288-32-4	= 220 mg/kg (Rat)	-	-
Bisphenol A 80-05-7	= 3200 mg/kg (Rat)	= 3000 mg/kg (Rabbit)	-
N-Aminoethyl piperazine 140-31-8	= 2140 mg/kg (Rat)	= 880 mg/kg (Rabbit)	-
Nonylphenol 25154-52-3	= 580 mg/kg (Rat)	= 2031 mg/kg (Rabbit)	-
Triethylene tetramine 112-24-3	= 2500 mg/kg (Rat)	= 550 mg/kg (Rabbit)	-
Benzyl dimethylamine 103-83-3	= 265 mg/kg (Rat)	= 1660 mg/kg (Rabbit)	-

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization May cause an allergic skin reaction.

Germ cell mutagenicity May cause genetic defects.

Carcinogenicity Not classifiable as a human carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Fused Silica 60676-86-0		Group 3		

Legend

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

Reproductive toxicity Suspected of damaging fertility or the unborn child.

Numerical measures of toxicity

Not determined

Unknown Acute Toxicity 54.5% of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Toxic to aquatic life with long lasting effects.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Benzyl alcohol 100-51-6	35: 3 h Anabaena variabilis mg/L EC50	460: 96 h Pimephales promelas mg/L LC50 static 10: 96 h Lepomis macrochirus mg/L LC50 static	EC50 = 50 mg/L 5 min EC50 = 63.7 mg/L 15 min EC50 = 63.7 mg/L 5 min EC50 = 71.4 mg/L 30 min	23: 48 h water flea mg/L EC50
Imidazole 288-32-4	130: 72 h Desmodesmus subspicatus mg/L EC50 82: 96 h Desmodesmus subspicatus mg/L EC50			341.5: 48 h Daphnia magna mg/L EC50
Bisphenol A 80-05-7	2.5: 96 h Pseudokirchneriella subcapitata mg/L EC50	3.6 - 5.4: 96 h Pimephales promelas mg/L LC50 flow-through 4.0 - 5.5: 96 h Pimephales promelas mg/L LC50 static 4: 96 h Oncorhynchus mykiss mg/L LC50 9.9: 96 h Brachydanio rerio mg/L LC50 static		10.2: 48 h Daphnia magna mg/L EC50 3.9: 48 h Daphnia magna mg/L EC50 9.2 - 11.4: 48 h Daphnia magna mg/L EC50 Static
N-Aminoethyl piperazine 140-31-8	495: 72 h Pseudokirchneriella subcapitata mg/L EC50	1950 - 2460: 96 h Pimephales promelas mg/L LC50 flow-through 1000: 96 h Poecilia reticulata mg/L LC50 semi-static 100: 96 h Oncorhynchus mykiss mg/L LC50 semi-static		32: 48 h Daphnia magna mg/L EC50
Nonylphenol 25154-52-3	0.41: 96 h Pseudokirchneriella subcapitata mg/L EC50 1.3: 72 h Desmodesmus subspicatus mg/L EC50	0.135: 96 h Pimephales promelas mg/L LC50 flow-through		0.14: 48 h Daphnia magna mg/L EC50 0.17 - 0.21: 48 h Daphnia magna mg/L EC50 Static 0.0874 - 0.124: 48 h Daphnia magna mg/L EC50 semi-static

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Triethylene tetramine 112-24-3	2.5: 72 h Desmodesmus subspicatus mg/L EC50 20: 72 h Pseudokirchneriella subcapitata mg/L EC50 3.7: 96 h Pseudokirchneriella subcapitata mg/L EC50	570: 96 h Poecilia reticulata mg/L LC50 semi-static 495: 96 h Pimephales promelas mg/L LC50		31.1: 48 h Daphnia magna mg/L EC50
Benzyl dimethylamine 103-83-3		35.8 - 39.9: 96 h Pimephales promelas mg/L LC50 flow-through		

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Benzyl alcohol 100-51-6	1.1
Imidazole 288-32-4	-0.02
Bisphenol A 80-05-7	2.2
N-Aminoethyl piperazine 140-31-8	-1.48
Nonylphenol 25154-52-3	3.28
Triethylene tetramine 112-24-3	-1.4

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

US EPA Waste Number

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
2,4,6-tri(dimethylaminomethyl)phenol 90-72-2		Included in waste stream: K060		

14. TRANSPORT INFORMATION

<u>Note</u>	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
<u>DOT</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u> Marine Pollutant	This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

TSCA	Listed
DSL	Listed
EINECS	Listed
AICS	Listed

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Reactive Hazard	Yes

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Bisphenol A - 80-05-7	80-05-7	1-5	1.0

US State Regulations

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Fused Silica 60676-86-0	X	X	
Benzyl alcohol 100-51-6		X	X
Bisphenol A 80-05-7	X	X	X
N-Aminoethyl piperazine 140-31-8	X	X	X
Nonylphenol 25154-52-3		X	X
Triethylene tetramine 112-24-3	X	X	X
Stoddard solvent 8052-41-3	X	X	X
Benzyl dimethylamine 103-83-3	X		

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	3	1	0	None
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal Protection
	Not determined	Not determined	Not determined	Not determined

Issue Date: 22-Oct-2011
 Revision Date: 11-Feb-2014
 Revision Note: New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet