



# Safety Data Sheet

Date Revised: 7/22/2015

Supersedes:

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**Product Name(s):** Five Star® Bonding Adhesive / Component B

Synonyms: N/A

Product Use: To enhance bonding of cement based construction products; general epoxy adhesive

Restrictions on Use: Use with Bonding Adhesive Component A


Manufacturer/Supplier: Five Star Products, Inc.  
60 Parrott Drive  
Shelton, CT 06484 USA

Phone #: 203-336-7900

**Emergency Phone #:** CHEM-TEL 1-800-255-3924  
(Outside the U.S. 1-813-248-0585)

## SECTION 2: HAZARD(S) IDENTIFICATION-GHS INFORMATION

**Classification:** Skin Corrosion/Irritation, Category 1B  
Skin Sensitization, Category 1

**Label Elements/Hazard Pictograms:** 

**Signal Word:** Danger

**Hazard Statements:** Causes severe skin burns and eye damage, H314  
May cause an allergic skin reaction, H317

**Precautionary Statements/Prevention:** If medical device is needed, have product container or label at hand.  
Keep out of reach of children.  
Read label before use.  
Do not breathe dust/fume/gas/mist/vapors/spray.

**Response:** If on SKIN: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
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 attention/advice.

**Storage:** Store locked up.

**Disposal:** Dispose of contents/container in accordance with local, regional, national, and international regulations.



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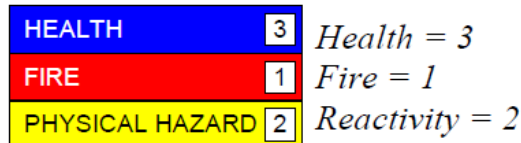
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## Classification System

NFPA ratings (scale 0-4):



HMS ratings (scale 0-4):



Results of PBT Assessment: N/A

Results of vPvB Assessment: N/A

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS		
Dangerous Components	CAS No.	% wt/wt
CYCLOHEX-1, 2-YLENEDIAMINE	694-83-7	5-15%
4-NONYLPHENOL, BRANCHED	84852-15-3	60-90%
HEXAMETHYLENEDIAMINE	124-09-4	≤5%

## SECTION 4: FIRST AID MEASURES

- General Information:** Immediately remove any clothing soiled by the product. Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- Inhalation:** If inhaled: Supply fresh air and be sure to call for a doctor. In case of unconsciousness, place patient stably in side position for transportation.
- Eye Contact:** If in eyes: Rinse opened eye for several minutes under running water. Then consult a doctor.
- Skin Contact:** In skin irritation continues, consult a doctor.
- Ingestion:** If swallowed: Immediately call a doctor. Drink copious amounts of water and provide fresh air. Immediately call a doctor. Seek medical treatment.
- Most important symptoms and effects, both acute and delayed:** No further relevant information available.



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**Indication of any immediate medical attention and special treatment needed:**

No further relevant information available.

## SECTION 5: FIRE-FIGHTING MEASURES

### MEANS OF EXTINCTION

**Suitable Extinguishing Media:** CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Special hazards arising from the substance or mixture:** No further relevant information available.

**Protection of Firefighters:** Because fire may produce thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment & Emergency Procedures:** Wear protective equipment. Keep unprotected persons away.

**Environmental Precautions:** Inform respective authorities in case of seepage into water course or sewage system.

**Methods and Material for Containment and Clean up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralizing agent. Dispose contaminated material as waste according to item 13.

**Reference to other sections:** See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## SECTION 7: HANDLING AND STORAGE

**Precautions for Safe Handling:** Wear appropriate personal protective clothing to prevent eye and skin contact. Avoid breathing vapors or mists of this product. Use with adequate ventilation. Do not take internally.

**Information about protection against Explosions and Fires:** No special measures required.

**Storage:** Store in a cool dry location. Store away from incompatible materials. Keep receptacle tightly sealed.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Additional information about design of technical systems:** No further data; see item 7.

### Control Parameters



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## Components with limit values that require monitoring at the workplace:

124-09-4 hexamethylenediamine	
TLV	Long-term value: 2.3 mg/m <sup>3</sup> , 0.5 ppm
WEEL	Long-term value: 1 ppm

## Exposure Controls

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

<b>Eye/Face Protection:</b>	Wear appropriate eye protection to prevent eye contact.
<b>Hand Protection:</b>	Wear protective gloves. The glove material has to be impermeable and resistant to the product / the substance / the preparation.
<b>Breathing Equipment:</b>	Not required.
<b>General Protective and Hygiene Considerations:</b>	Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Liquid
<b>Color:</b>	Grey
<b>Odor:</b>	Distinctive
<b>Odor Threshold:</b>	Not determined
<b>pH value:</b>	Not determined
<b>Melting Point / Melting Range:</b>	Undetermined
<b>Boiling Point / Boiling Range:</b>	Undetermined
<b>Flash Point:</b>	>94°C (>201°F)
<b>Flammability (solid, gaseous):</b>	Not applicable
<b>Ignition temperature:</b>	Not applicable
<b>Decomposition Temperature:</b>	Not determined
<b>Auto Igniting:</b>	Product is not self-igniting.
<b>Danger of Explosion:</b>	Product does not present an explosion hazard.
<b>Explosion Limit – Lower:</b>	Not determined
<b>Explosion Limit – Upper:</b>	Not determined
<b>Vapor Pressure:</b>	Not determined
<b>Density at 20°C (68°F):</b>	0.946 g/cm <sup>3</sup> (7.894 lbs/gal)
<b>Relative Density:</b>	Not determined
<b>Vapor Density:</b>	Not determined



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<b>Evaporation Rate:</b>	Not determined
<b>Solubility in / Miscibility with Water:</b>	Not miscible or difficult to mix.
<b>Partition Coefficient: n-Octanol/Water:</b>	Not determined
<b>Viscosity, Dynamic:</b>	Not determined
<b>Viscosity, Kinematic:</b>	Not determined
<b>Organic Solvents:</b>	0.0%
<b>Solids Content:</b>	100.0%
<b>Other information:</b>	No further relevant information available
<b>Volatile Organic Compounds:</b>	Not determined

## SECTION 10: STABILITY AND REACTIVITY

### Reactivity

#### Chemical Stability

#### Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

#### Possibility of hazardous reactions:

No dangerous reactions known.

#### Conditions to Avoid:

No further relevant information available.

#### Incompatible materials:

No further relevant information available.

#### Hazardous decomposition products:

No dangerous decomposition products known.

## SECTION 11: TOXICOLOGICAL INFORMATION

### Information on toxicological effects

#### Acute Toxicity:

#### LD/LC50 values that are relevant for classification:

<b>124-09-4 Hexamethylenediamine</b>		
Oral	LD50	750 mg/kg (rat)
Dermal	LD50	1110 mg/kg (rabbit)

#### Primary Irritant Effect On the Skin:

Caustic effect on skin and mucous membranes.

#### Primary Irritant Effect On the Eye:

Strong caustic effect.

#### Sensitization:

Sensitization possible through skin contact.

#### Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:  
Harmful



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Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

## Carcinogenic Categories

**IARC (Int'l Agency for Research on Cancer):**

None of the ingredients is listed.

**NTP (National Toxicology Program):**

None of the ingredients is listed.

**OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients is listed.

## SECTION 12: ECOLOGICAL INFORMATION

### Toxicity

**Aquatic Toxicity:** No further relevant information available.

**Persistence and Degradability:** No further relevant information available.

**Bio-accumulative Potential:** No further relevant information available.

**Mobility in Soil:** No further relevant information available.

**Ecotoxicological Effects:** Very toxic for fish

### Additional Ecological Information

**General Notes:** Water hazard class 1 (self-assessment): Slightly hazardous for water. Must not reach bodies of water or drainage ditch undiluted or unneutralized. Also poisonous for fish and plankton in water bodies. Very toxic for aquatic organisms.

**PBT Assessment:** N/A

**vPvB Assessment:** N/A

**Other Adverse Effects:** No further relevant information available.

## SECTION 13: DISPOSAL CONSIDERATIONS

### Waste Treatment Methods

**Recommendation:** Must not be disposed of as normal garbage. Do not allow product to reach sewage system. It is the generator's responsibility to determine if the waste meets applicable definitions of hazardous waste. State and local regulations may differ from federal disposal regulations. Dispose of waste material according to local, state, federal and provincial environmental regulations.



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**Uncleaned Packaging Recommendation:**

Disposal must be made according to Federal, State & Local regulations.

**SECTION 14: TRANSPORT INFORMATION**

**UN-Number - DOT, ADR, IMDG, IATA:**

UN1760

**UN Proper Shipping Name**

**DOT:** Corrosive liquid, n.o.s. (nonylphenol)

**ADR:** 1760 Corrosive liquids, n.o.s. (nonylphenol)

**IMDG:** Corrosive Liquid, N.O.S. (nonylphenol), Marine Pollutant

**IATA:** Corrosive Liquid, N.O.S. (nonylphenol)

**Transport Hazard Class(es)**

**DOT, ADR, IATA, IMDG**

**Class:** 8 Corrosive substances

**Label:** 8

**Packing Group:** III

**DOT, ADR, IMDG, IATA**

**Environmental Hazards**

**Marine Pollutant:** Yes  
Symbol (fish and tree)

**Special Precautions for User:** Warning: Corrosive substances

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:**

Not applicable

**Transport/Additional Information**

**DOT Remarks:** Add "Marine Pollutant" to end of proper shipping name if shipping in a bulk container (>119 gallons).  
Special marking with the symbol (fish and tree).

**ADR Excepted quantities (EQ):** Code: E1  
Maximum net quantity per inner packaging: 30ml  
Maximum net quantity per outer packaging: 1000ml

**U.S. Domestic Ground Shipments:** Same as listed for Standard Shipments above.

**U.S. Domestic Ground Non-Bulk (119 gal or less per container) Shipments:** Same as listed for Standard Shipments above.

**Emergency Response Guide (ERG) Number:** Not determined



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**IMDG Limited quantities (LQ):** 5L

**IMDG Exceeded quantities (EQ):** Code:E1  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 1000 ml

**UN "Model Regulation":** UN1760, Corrosive liquids, n.o.s. (nonylphenol), 8, III

## SECTION 15: REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

### SARA

**Section 355 (Extremely Hazardous Substances):** None of the ingredients are listed.

**Section 313 (Specific toxic chemical listings):**

This product may contain 1 or more toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372. If so, the chemicals are listed: None of the ingredients are listed.

**TSCA (Toxic Substances Control Act):**

694-83-7	Cyclohex-1, 2-ylenediamine
124-09-4	Hexamethylenediamine
110-60-1	Tetramethylenediamine
156-87-6	3-aminopropan-1-ol
15520-10-2	2-methylpentane-1, 5-diamine

**CA Proposition 65:** None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for females:** None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for males:** None of the ingredients are listed.

**Chemicals known to cause developmental toxicity:** None of the ingredients are listed.

**Cancerogenity Categories**

**EPA (Environmental Protection Agency):** None of the ingredients are listed.

**TLV (Threshold Limit Value established by ACGIH):** None of the ingredients are listed.

**MAK (German Maximum Workplace Concentration):** None of the ingredients are listed.





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**NIOSH-Ca (National Institute for Occupational Safety and Health):**

None of the ingredients are listed.

**Chemical Safety Assessment:**

A Chemical Safety Assessment has not been carried out.

## SECTION 16: OTHER INFORMATION

**Disclaimer:**

This information is furnished without warranty of any kind, expressed or implied. Five Star Products, Inc. bases the information and recommendations in this document on data believed to be current and accurate.