



Safety Data Sheet

Date Revised: 5/28/2019

Supersedes: 9/3/2015

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name(s): Five Star® Injection Gel / Component B
Five Star® Underwater Epoxy Gel / Component B

Synonyms: N/A

Product Use: Crack and concrete surface repair; sealing

Restrictions on Use: Use with Injection Gel Component A
Use with Underwater Epoxy Gel 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
Sensitization - Skin, Category 1
Acute Toxicity, Category 4

Label Elements/Hazard Pictograms:



Signal Word: Danger

Hazard Statements: Causes severe skin burns and eye damage, H314.
May cause an allergic skin reaction, H317
Harmful if inhaled, H332.

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 (or hair): 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. Specific treatment (see on this label).



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Storage: Store locked up.

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

Classification System

NFPA ratings (scale 0-4):



| SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS | | |
|---|------------|---------|
| Dangerous components | CAS No. | % wt/wt |
| m-phenylenebis (methylamine) | 1477-55-0 | 10-25 |
| cyclohex-1, 2-xylenediamine | 694-83-7 | ≤10 |
| 4-nonylphenol, branched | 84852-15-3 | 10-25 |
| Hexamethylenediamine | 124-09-04 | <5 |

SECTION 4: FIRST AID MEASURES

General Information: Immediately remove any clothing soiled by the product.

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: 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.

Indication of any immediate medical attention and special treatment needed: No further relevant information available.



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SECTION 5: FIRE-FIGHTING MEASURES

MEANS OF EXTINCTION

- Suitable Extinguishing Media:** CO₂, 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 and Emergency Procedures:** Wear protective equipment. Keep unprotected persons away.
- Environmental Precautions:** Do not allow product to reach sewage system or any water course.
- 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. Ensure adequate ventilation.
- 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 measure 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.

Components with limit values that require monitoring at the workplace:

| | |
|---|---|
| 1477-55-0 m-phenylenebis (methylamine) | |
| REL | Ceiling limit value: 0.1 mg/m ³ , Skin |



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|--------------------------------------|---|
| TLV | Ceiling limit value: 0.1 mg/m ³ , Skin |
| 124-09-4 hexamethylenediamine | |
| TLV | Long-term value: 2.3 mg/m ³ , 0.5 ppm |
| WEEL | Long-term value: 1 ppm |

PERSONAL PROTECTIVE EQUIPMENT (PPE)

- Eye/Face Protection:** Wear appropriate eye protection to prevent eye contact.
- Hand Protection:** Wear protective gloves. The glove material has to be impermeable and resistant to the product / the substance / the preparation.
Material of Gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality material and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.
Penetration time of Glove Material: The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Breathing Equipment:** Use suitable respiratory protective device when high concentrations are present. In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- General Protective and Hygiene Considerations:** Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases/fumes/aerosols. Avoid contact with the eyes and skin.

| SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES | |
|---|-------------------------------|
| Appearance: | Liquid |
| Color: | Grey |
| Odor: | Distinctive |
| Odor Threshold: | Not determined |
| pH value: | Not determined |
| Melting Point / Melting Range: | Undetermined |
| Boiling Point / Boiling Range: | Undetermined |
| Flash Point: | >94°C (>201°F) |
| Flammability (solid, gaseous): | N/A |
| Ignition Temperature: | 275.0°C (527°F) |
| Decomposition Temperature: | Not determined |
| Auto Igniting: | Product is not self-igniting. |



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| Danger of Explosion: | Product does not present an explosion hazard. |
| Explosion Limit – Lower: | 0.5 Vol% |
| Explosion Limit – Upper: | 13.0 Vol% |
| Vapor Pressure at 20°C (68°F): | 0.1 hPa |
| Density at 20°C (68°F): | 1.776 g/cm ³ (14.821 lbs/gal) |
| Relative Density: | Not determined |
| Vapor Density: | Not determined |
| Evaporation Rate: | Not determined |
| Solubility in / Miscibility with Water: | Not miscible or difficult to mix. |
| Partition Coefficient (n-octanol/water): | Not determined |
| Viscosity, Dynamic: | Not determined |
| Viscosity, Kinematic: | Not determined |
| Organic Solvents: | 12.0% |
| Solids Content: | 100.0% |
| Other information: | No further relevant information available |
| Volatile Organic Compounds: | Not determined |

SECTION 10: STABILITY AND 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

Acute Toxicity

LD/LC50 values that are relevant for classification:

| 1477-55-0 m-phenylenebis (methylamine) | | |
|---|----------|------------------|
| Oral | LD50 | 1040 mg/kg (rat) |
| Inhalative | LC50/4 h | 2.4 mg/l (rat) |



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| 124-09-4 hexamethylenediamine | | |
|-------------------------------|------|---------------------|
| 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:

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 are listed.

NTP (National Toxicology Program):

None of the ingredients are listed.

OSHA-Ca:

None of the ingredients are 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.

Additional Ecological Information

General Notes:

Water hazard class 3 (self-assessment): Extremely hazardous for water.

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Water hazard class 1 (self-assessment): Slightly hazardous for water.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

PBT Assessment:

Not applicable

vPvB Assessment:

Not applicable



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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.

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 liquids, 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
DOT, ADR, IATA, IMDG 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
Danger code (Kemler): 886
EMS Number: F-A, S-B

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not Applicable

Transport/Additional Information



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| 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: 30 ml Maximum net quantity per outer packaging: 1000 ml |
| 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: | 153 |
| IMDG Limited quantities (LQ): | 5L |
| IMDG Excepted 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

SARA

| | |
|---|---|
| Section 355 (Extremely Hazardous Substances): | None of the ingredients are listed. |
| Section 313 (Specific toxic chemical listings): | None of the ingredients are listed. |
| TSCA (Toxic Substances Control Act): | 1477-55-0, m-phenylenebis (methylamine) 694-83-7, cyclohex-1, 2-ylenediamine 124-09-4, hexamethylenediamine 84852-15-3, Phenol, 4-Nonylphenol - branched |

CA Proposition 65

Chemicals known to the State of California to cause cancer: 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.

Carcinogenicity Categories

EPA: None of the ingredients are listed.



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TLV: None of the ingredients are listed.

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

NIOSH-Ca: None of the ingredients are listed.

National regulations

Water hazard class: Water hazard class 3 (self-assessment): Extremely hazardous for water.

Chemical Safety Assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: OTHER INFORMATION

HMIS (Hazardous Material Information System):

| Health | Flammability | Physical Hazard | Personal Protection |
|--------|--------------|-----------------|---------------------|
| 3 | 1 | 2 | X, B |

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