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## **SAFETY DATA SHEET**

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**DATE:** 7/17/18

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### **1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

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**(a) PRODUCT NAME IDENTIFIER USED ON LABEL:**

No. 1 Vary Flex Hardener, Type HV.

**(b) OTHER MEANS OF IDENTIFICATION:**

**Synonyms:** Polyamide resin

**Chemical formula:** NA

**CAS Numbers:** See section 3

**Other:** none

**(c) RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS**

Hardener for epoxy resin.

**(d) NAME, ADDRESS AND TELEPHONE NUMBER OF MANUFACTURER**

**Manufacturer's** IsleChem, LLC

**Name and** 2801 Long Road

**Address:** Grand Island, NY 14072

**Telephone:** 716-773-8100

**(e) EMERGENCY PHONE NUMBER**

**24 Hour emergency telephone:** 1-800-424-9300

**To request an SDS:** 1-716-773-8100

**Customer service:** 1-716-773-8100

**PRODUCT NAME:** No. 1 Vary Flex Hardener, Type HV.

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## 2. HAZARDS IDENTIFICATION

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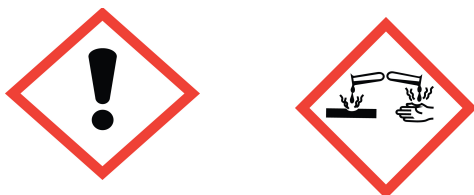
### (a) CLASSIFICATION OF CHEMICAL IN ACCORDANCE WITH 29 CFR 1910(d)

**Health:** Serious eye damage, category 1; Skin sensitization, category 1B

**Physical:** none

### (b) SYMBOLS, SIGNAL WORD, HAZARD AND PRECAUTIONARY STATEMENTS IN ACCORDANCE WITH 29 CFR 1910.1200(d)

#### Symbols (Pictograms)



#### Signal Words, Hazard and Precautionary Statements:

**Danger:** Causes serious eye damage. May cause an allergic skin reaction.

Avoid breathing fumes/mist/vapor/spray. Wear protective gloves and clothing. Wash hands thoroughly after handling. Wear eye, and face protection. Wash contaminated clothing before reuse. Contaminated work clothing must not be allowed out of the workplace.

IF ON SKIN: Wash with plenty of water. 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. Immediately call a doctor.

Dispose of contents and container in accordance with local, state and federal regulations.

### (c) HAZARDS NOT OTHERWISE CLASSIFIED

None

### (d) MIXTURE INGREDIENT(S) THAT ARE NOT CLASSIFIED FOR TOXICITY

None at greater than 1%.

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

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**PRODUCT NAME:** No. 1 Vary Flex Hardener, Type HV.

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(a) Chemical Name	(b) Common Name & Synonyms	(c) CAS Number	(d) Concentration Weight %
Polyamide resin	NA	68410-23-3	84.5%
Triethylenetetramine	Versamide	112-24-4	7.3%
N,N'bis (2-aminoethyl) piperazine	NA	6531-38-0	1.5%
Piperazinylethyl-ethylenediamine	NA	24028-46-4	1.0%
Tris(aminoethyl) amine	NA	4097-89-6	0.5%
2,3,6-Tris(Dimethylaminomethyl) phenol	NA	90-72-2	0.2.

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## 4. FIRST AID MEASURES

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### (a) DESCRIPTION OF FIRST AID MEASURES BY ROUTES OF ENTRY

**EYES:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Washing eyes within several seconds is essential to achieve maximum effectiveness. GET MEDICAL ATTENTION IMMEDIATELY.

**SKIN:** Immediately flush thoroughly with cool water under shower while removing contaminated clothing and shoes.. If skin shows inflammation or rash, GET MEDICAL ATTENTION. Wash clothing before reuse

**INHALATION:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, have trained person administer oxygen. If respiration stops, have a trained person administer artificial respiration. GET MEDICAL ATTENTION IMMEDIATELY.

**INGESTION:** NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. If swallowed, rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician. If vomiting occurs spontaneously, keep airway clear and give more water. GET MEDICAL ATTENTION IMMEDIATELY.

### (b) MOST IMPORTANT SYMPTOMS AND EFFECTS

**Potential health effects:**

**Routes of entry:** Ingestion, inhalation, skin, eyes.

**Target organs:** None known.

**PRODUCT NAME:** No. 1 Vary Flex Hardener, Type HV.

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**Irritancy:** Causes skin irritation or burns on prolonged contact

**Sensitizing capability:** May cause skin sensitization. Causes eye burns.

**Reproductive effects:** None known.

**Cancer information:** This product does not contain any substances at > 0.1 weight % that are considered by OSHA, NTP, IARC or AGCIH to be “probable” or “suspected” carcinogens.

This product contains chemicals known to the State of California to cause cancer.

**Short term exposure (acute):**

**Inhalation:** May be harmful if inhaled.

**Eyes:** Causes severe eye burns

**Skin:** May cause irritation and sensitization.

**Ingestion:** May be harmful by ingestion. LD50 > 10g/kg (rat)

**Repeated exposure (chronic)**

Could cause skin sensitization.

**Synergistic materials:** None known.

**Medical conditions aggravated by exposure:** None known.

**(c) INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT**

As indicated above

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**5. FIRE FIGHTING MEASURES**

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**(a) SUITABLE EXTINGUISHING MEDIA**

Dry chemical, alcohol foam, carbon dioxide.

**(b) SPECIFIC HAZARDS ARISING FROM THE CHEMICAL**

Not a flammable liquid but will burn under fire conditions. Oxides of carbon and nitrogen form as combustion products.

**(c) SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS**

In fire conditions wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus and full protective clothing. Keep unauthorized personnel removed and upwind.

(note: see section 9 for flash point, LEL, UEL, and auto-ignition temperature)

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**6. ACCIDENTAL RELEASE MEASURES**

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**PRODUCT NAME:** No. 1 Vary Flex Hardener, Type HV.

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**(a) PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES**

Follow protective measures provided in section 2 and section 8.

Contain spill with dike to prevent entry into sewers or waterways. Spills or releases should be reported, if required, to the appropriate local, state and federal agencies.

**(b) METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP**

Absorb spill using suitable absorbent. Sweep or vacuum absorbent and place in containers for recovery or disposal. Dispose of clean-up materials per section 13.

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**7. HANDLING AND STORAGE**

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**(a) PRECAUTIONS FOR SAFE HANDLING**

Avoid breathing mist or vapor. Use with adequate ventilation. Use general and local ventilation as needed. Wear NIOSH/MSHA approved respiratory protection if there is potential for exposure above the exposure limits.

**(b) CONDITIONS FOR SAFE STORAGE, INCOMPATIBILITIES**

Keep container tightly closed and properly labeled. Store in a cool, dry and locked area.

Incompatibilities: See section 10

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**(a) EXPOSURE LIMITS**

<i>Component</i>	<i>Weight Percent</i>	<i>OSHA</i>	<i>ACGIH TLV</i>
Polyamide resin	84.5%	Not established	Not established
Triethylenetetramine	7.3%	Not established	Not established
N,N'bis (2-aminoethyl) piperazine	1.5%	Not established	Not established
Piperazinylethyl-ethylenediamine	1.0%	Not established	Not established
Tris(aminoethyl) amine	0.5%	Not established	Not established
2,3,6-Tris(Dimethylaminomethyl) phenol	0.2%	Not established	Not established

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### **(b) ENGINEERING CONTROLS**

Since this material may be irritating to skin and mucous membranes, general room ventilation plus local exhaust at points of emission should be used to maintain levels of airborne contaminants as low as feasibly possible.

### **(c) PERSONAL PROTECTION**

**Respiratory:** Wear a NIOSH/MSHA approved respirator following manufacturer's recommendations, where airborne contaminants may occur.

**Eye/face:** Wear safety glasses with side shields or chemical safety goggles and a face shield as appropriate (ANSI Z87.1).

**Skin:** Contact should be prevented by use of appropriate personal protective clothing. Wear chemical resistant gloves such as rubber, neoprene or vinyl.

**Other:** Emergency shower and eyewash facility should be in close proximity (ANSI Z358.1).

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## **9. PHYSICAL AND CHEMICAL PROPERTIES**

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**(a) Appearance and Odor:** Viscous, amber liquid with slight amine odor.

**(b) Odor Threshold:** Not available

**(c) pH:** Not available

**(d) Specific Gravity (H<sub>2</sub>O = 1):** 0.97

**(e) Melting Point/Freezing Point:** Not available

**(f) Boiling Point @ 760 mm Hg/Boiling Point Range:** > 150° C

**(g) Flash Point:** 355 °F

**(h) Evaporation rate:** Not available

**(i) Flammability:** Not a flammable liquid but will burn under fire conditions.

**(j) Lower explosive limit (LEL)/Upper explosive limit (UEL):** Not available/ Not available

**(k) Vapor Pressure:** Not available

**(l) Vapor density:** Not available

**(m) Relative density:** 0.97g/cm<sup>3</sup>

**(n) Solubility in Water:** Moderate

**(o) Partition coefficient:** Not available

**(p) Auto ignition temperature:** Not available

**(q) Decomposition temperature:** Not available

**(r) Viscosity:** Not available

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## **10. STABILITY AND REACTIVITY**

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**PRODUCT NAME:** No. 1 Vary Flex Hardener, Type HV.

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**a) REACTIVITY**

No data available

**b) CHEMICAL STABILITY**

Stable under recommended storage conditions

**c) POSSIBILITY OF HAZARDOUS REACTION**

Hazardous polymerization will not occur.

**d) CONDITIONS TO AVOID**

See 10 a, c and e

**e) INCOMPATIBLE MATERIALS**

Strong oxidizing agents.

**f) HAZARDOUS DECOMPOSITION PRODUCTS**

Carbon monoxide & carbon dioxide.

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## **11. TOXICOLOGICAL INFORMATION**

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**a) INFORMATION ON LIKELY ROUTES OF EXPOSURE**

See section 4.

**b) SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS**

See sections 2 and 4.

**c) DELAYED AND IMMEDIATE EFFECTS**

See section 4.

**d) NUMERICAL MEASURES OF TOXICITY**

ACUTE ORAL TOXICITY: LD50: >10 g/kg (rat)

ACUTE DERMAL TOXICITY: LD50 4.5 g/kg (rabbit)

**e) CARCINOGENICITY**

This product does not contain any substances at > 0.1 weight % that are considered by OSHA, NTP, IARC or AGCIH to be “probable” or “suspected” carcinogens.

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## **12. ECOLOGICAL INFORMATION**

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**a) ECOTOXICITY**

No data available

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**b) PERSISTENCE AND DEGRADABILITY**

No data available

**c) BIOACCUMULATIVE POTENTIAL**

No data available

**d) MOBILITY IN SOIL**

No data available

**e) OTHER ADVERSE EFFECTS**

None known.

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### **13. DISPOSAL CONSIDERATIONS**

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Dispose of all waste, contaminated containers and contaminated equipment in accordance with all applicable federal, state and local health and environmental regulations. Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts.

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### **14. TRANSPORTATION INFORMATION**

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**a) UN NUMBER:**

Not regulated

**b) UN PROPER SHIPPING NAME:**

NA

**c) TRANSPORT HAZARD CLASSES**

NA

**d) PACKING GROUP**

NA

**e) ENVIRONMENTAL HAZARDS**

NA

**e) TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL**

None

**f) SPECIAL PRECAUTIONS**



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NA

**g) IATA**

Not regulated

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**15. REGULATORY INFORMATION**

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**U.S. FEDERAL REGULATIONS:** OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, safety data sheets, training and access to written records. We request that you, and it is your legal duty to, make all information in this Safety Data Sheet available to your employees.

To aid our customers in complying with regulatory requirements, SARA Title III Hazard Categories for this product are indicated below. If the word "YES" appears next to any category, this product may be reportable by you under the requirements of 40.CFR.370. Please consult those regulations for details.

**SARA/TITLE III HAZARD CATEGORIES:**

Immediate(Acute) Health:	YES	Reactive Hazard:	NO
Delayed (Chronic) Health:	YES	Sudden Release of Pressure:	NO
Fire Hazard:	NO		

**TSCA:** All components contained in this substance are listed on the TSCA inventory.

**HMIS HAZARD RATINGS:**

HEALTH HAZARD: 3      FIRE HAZARD: 1      REACTIVITY: 0

**STATE REGULATIONS:** Consult local laws for applicability.

**INTERNATIONAL REGULATIONS:** Consult the regulations of the importing country.

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**16. OTHER INFORMATION**

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**SDS LEGEND:**

ACGIH = American Conference of Governmental Industrial Hygienists

ANSI = American National Standards Institute

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CAS = Chemical Abstracts Service Registry Number

CEILING = Ceiling Limit (Duration is for 15 minutes, unless otherwise noted.)

CEL = Corporate Exposure Limit

CERCLA = Comprehensive Environmental Response Compensation and Liability Act

CFR = Code of Federal Regulations (USA)

COC = Cleveland Open Cup

DOT = Department of Transportation

LEL = Lower explosive limit

MARPOL = International Convention for the Prevention of Pollution from Ships

MSHA = Mine Safety and health Administration

NTP = National Toxicological Program

NIOSH = National Institute for Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

GHS = Global Harmonized System

IARC = International Agency for Research on Cancer

PEL = Permissible Exposure Limit (OSHA)

Ppm = parts per million

RQ = Reportable Quantity per 40 CFR 355

SARA = Superfund Amendments and Re-authorization Act

SDS = Safety Data Sheet

STEL = Short Term Exposure Limit (Duration is for 15 minutes, unless otherwise noted.)

TLV = Threshold Limit Value (ACGIH)

TWA = Time Weighted Average (8 hr)

UEL = Upper Explosive Limit

\* = See section 3 Hazards Identification - Repeated Exposure (Chronic)

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**MOST RECENT VERSION OF THIS SDS:** 7/17/18