


# TECHNICAL & SAFETY DATA SHEET

<b>Technical Data Sheet</b>		
<b>SP-20 Flexible Urethane Membrane</b>		
<b>POLYMER NATION CHEMICAL COMPANY, LLC</b>		
<p><b>Product Overview:</b> SP-20 is a flexible aromatic urethane that has extreme tensile strength with an A shore hardness of 75. It is easy to install, has little odor and has elongation of over 1000%. It far outperforms epoxy membranes in crack-bridging and as a waterproofing membranes under Polymer Nation floor systems.</p> <p><b>Uses:</b> SP-20 is primarily used as a membrane in parking decks and waterproofing applications. It can also be used as a flexible broadcast resin, as a binder in flexible floor applications and bulked up using fumed silica to make a flexible patching paste.</p> <p><b>Preparation:</b> The preparation method for each project is determined by a full understanding of the substrate to be coated, the chemistry of the coating system being used, the coating system thickness, and numerous other factors. The coating installer should fully read and understand ICRI Guideline NO.03732 and OSHA 29 CFR 1926.1153 before starting preparatory work. The aim, of preparing a substrate for coating applications, is to roughen the surface, remove weak layers, contaminants, dirt, debris and present a solid, clean, dry substrate for the primer. If unsure as to the level of preparation needed contact Polymer Nation at Lab@polymerNation.com.</p> <p>The data below represents the most pertinent information needed by a professional installer to understand and efficiently install this material. The data was gathered at temperatures of 72-75 F and 30-50% RH. A wide array of independent and company test data has been compiled on this product but is too large to place on this Technical Data Sheet. Please direct inquiries for detailed test reports on this product to Lab@polymerNation.com.</p>		
<b>Description</b>	<b>Results</b>	<b>Notes</b>
Kit Yield in Gallons	5	1 mix kit consists of 4.30 gal A and .70 gal B
Number of Components	2	
Mix Ratio Liquids by Volume	Not Provided	Do not split kits.
Ideal Application Temperatures	60F-90F	Verify that substrate temperature is above 5 degrees of dewpoint during application and cure of material to avoid a potential amine blush
Mixed Viscosity in cP@25C/77F	2000	Warmer temperatures will reduce viscosity and lower temperatures will increase viscosity
Gel Time	23 min.	Warmer temperatures will decrease gel time and lower temperatures will increase gel time
Dry to Touch	2.5 Hours	Warmer temperatures will reduce time and colder temperatures will increase time
Through Dry	4 Hours	Warmer temperatures will reduce time and colder temperatures will increase time
Dry to Walk	8 Hours	Warmer temperatures will reduce time and colder temperatures will increase time
Dry to Lightly Use	12 Hours	Warmer temperatures will reduce time and colder temperatures will increase time
Full Cure	7 Days	Warmer temperatures will reduce time and colder temperatures will increase time
Shore Hardness at 24 hours	A 40	Warmer temperatures will increase hardness
Shore Hardness at 7 days	A 75	Warmer temperatures will shorten time to reach full hardness
Gloss @ 60 Degree Angle	75-80	Applying material close to dew point will decrease gloss and may result in an amine blush
VOC's of Mixed Material	<8 g/L	EPA Method 24
Color Scale per ASTM D1500	N/A	
Solids by Volume Mixed	100%	
Storage	60F-90F	Store material between 60-90 degrees F in a protected dry location.
Odor	Very Subtle	
Application Thickness in Mils	As an unfilled membrane 20-30	
Disposal	Dispose of material, containers, solvents, etc., per Federal, State and local guideline, rules and laws	
Available Colors	Light Gray	
Mixing & Installation	Combine all of part A and B into a single container, large enough to accept the entire kit. Mix at 350 RPM for 2-3 minutes using an appropriate mixing blade and making sure not to introduce excessive air into the solution. Pour the entire content from the container onto the floor and follow normal squeegee and back roll or cut and roller techniques. Recoat within 24 hours. Clean tools with a solvent similar to Xylene or Acetone. When a thicker membrane is desired, mix PN 1620 S with a full kit. This mix will cover 160 square feet at 60 mils. and spread evenly up to 200 mils.	
<p>Polymer Nation believes the information contained herein to be true and accurate. Information contained herein is for evaluation purposes only. Polymer Nation makes no warranty, express or implied based upon this literature and assumes no liability or responsibility for consequential or incidental damages as a result of the use of these products and systems described herein, including any warranty of merchantability or fitness. Last Rev. 4.14.22</p>		
<a href="http://PolymerNation.com">PolymerNation.com</a>		

# TECHNICAL & SAFETY DATA SHEET

## 1. PRODUCT AND COMPANY IDENTIFICATION

DATE PRINTED:	10/27/22
MSDS REF. No:	E2

**Product Name:** SP-15 Part A  
**Product Code:** E2  
**Supplier/Manufacturer:** POLYMER NATION CHEMICAL  
1949 Swanson Court  
Gurnee, IL 60031  
(847) 774-5038

**EMERGENCY PHONE:** CHEMTREC, US (800) 424-9300 24-hours  
**ORIGINAL DATE ISSUED:** 3/19/13 **REVISION DATE:** 2/12/2020

**Recommended end use:** Half of a two-component system designed for application and use as a protective coating.

## 2. HAZARDS IDENTIFICATION

**Acute Toxicity, Category 4**  
**Skin Irritant, Category 2**  
**Skin Sensitization, Category 1**



**SIGNAL WORD:** Warning

**Hazard-determining components of labeling:** Alkyl C<sub>12</sub>-C<sub>14</sub> Glycidyl Ether

### Hazard Statements

H317 May cause an allergic skin reaction  
H315 Causes Skin Irritation  
H302 Harmful if swallowed  
H335 May cause respiratory irritation

### Precautionary Statements

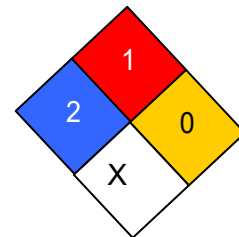
P264: Wash hands thoroughly  
P271: Use only in a well-ventilated area  
P273 Avoid Release to the Environment  
P280 Wear protective gloves/ protective clothing/eye protection/face protection.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue Rinsing.  
P310 Immediately Call a POISON CENTER or doctor/physician.

HMIS RATING	
Health:	2
Flammability:	1
Reactivity:	0
Personal Protection:	X

### Potential Health Effects:

**SKIN:** May cause irritation. Allergic reaction possible.  
**EYES:** Liquid, aerosols, and vapors may cause eye pain, tearing, reddening, swelling, and stinging.  
**INHALATION:** May cause respiratory tract irritation.  
**INGESTION:** May cause irritation and potential burns to tissues.  
**CHRONIC HAZARDS:** Prolonged or repeated contact may cause allergic skin reactions or dermatitis.

### NFPA CODES



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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

This document is a pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). Where a proprietary ingredient is shown, the identity may be made available as provided in this standard. All components of this product are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

Chemical Name	Weight %	CAS Number
Bisphenol A Epoxy Resin	60-100%	25085-99-8

## 4. FIRST AID MEASURES

**GENERAL ADVICE:** Consult a physician. Show this safety data sheet to physician in attendance.

**EYES:** Hold eyelids open and flush with plenty of water for at least 20 minutes. Get medical attention if irritation develops or persists.

**SKIN:** Remove product and flush with plenty of water for at least 20-30 minutes. Contact a physician if irritation develops or persists. Wash with soap and water. Remove contaminated clothing immediately, wash before next use, and discard any items too difficult to clean.

**INGESTION:** DO NOT INDUCE VOMITING! Obtain medical care and hospital treatment immediately. Give victim a glass of water or milk. Never give anything by mouth to an unconscious person.

**INHALATION:** Consult a physician. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

## 5. FIRE FIGHTING MEASURES

**SUITABLE EXTINGUISHING MEDIA:** Alcohol Foam. Dry Chemical Foam. Carbon Dioxide.

**For safety reasons, unsuitable extinguishing agents:** Water spray. Water fog.

**SPECIAL FIRE & UNUSUAL HAZARD:** May generate toxic or irritating combustion products. May generate carbon monoxide gas. May generate toxic nitrogen oxide gases.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:** Firefighters should wear butyl rubber boots, gloves, and body suit as well as a self-contained breathing apparatus.

**ADDITIONAL INFORMATION:** Remove all ignition sources. Water runoff can cause environmental damage. Dike and collect water used to fight fire.

**HAZARDOUS COMBUSTION PRODUCTS formed under fire conditions:** Carbon oxides, nitrogen oxides.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Use personal protective equipment. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe area. Ensure adequate ventilation.

**Environmental precautions:** Prevent further leaking if safe to do so. Dike Spill Area. Flush area with water spray. Absorb spill with inert material (ex. dry sand or earth) and place in a chemical waste container for disposal. Avoid runoff into storm sewers and ditches which lead into waterways. Discharge into the environment must be avoided. If seepage into the environment has occurred, notify respective authorities.

See Section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7. HANDLING AND STORAGE

**HANDLING:** Handle in a well-ventilated workspace. Empty containers may contain explosive vapors. Flush empty containers with water to remove residual flammable liquid vapors. Avoid breathing dust, vapor, or mist. Avoid contact with eyes. Avoid contact with skin or clothing.

**STORAGE:** Keep from freezing. Keep container closed when not in use. Keep container in a cool, well-ventilated place. Keep away from food, drink, and animal feed stuffs. Keep away from ignition sources and other incompatibilities. Store in original container or a container very similar to that of the original.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Ventilation:** Good general ventilation should be sufficient to control airborne levels. Local exhaust ventilation may be necessary to control any air contaminants.

**Personal Protection Equipment:**

**Respiratory Protection:** In poorly ventilated areas, a cartridge mask NIOSH approved for organic vapors is recommended. For emergency situations use self-contained breathing apparatus with pressure demand mode.

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**Skin Protection:** Where contact is likely, wear chemical resistant gloves, rubber boots, and chemical safety goggles. Gloves should be tested for chemical resistance before reliable use. (penetration times, rates of diffusion and rate of degradation). Wear long sleeves and pants, exposing as little skin as possible.



**Eye Protection:** Wear chemical safety glasses with side shields or goggles. In the event of an emergency, use eye goggles with a full-face shield. DO NOT WEAR CONTACT LENSES when working with this material!!

**Hygienic Practices:** Wash hands before eating. Remove contaminated clothing and wash before reuse. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin, and clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Volatile Organic Content:</b> 12.4277457 g/L	<b>Solubility in Water:</b> Insoluble
<b>Color:</b> Gardener Scale 1-2	<b>Specific Gravity @ 20°C:</b> 1.1352816
<b>Odor:</b> Faint Epoxy Odor.	<b>pH @ 100%:</b> N.A.
<b>Physical Appearance:</b> Clear liquid.	<b>Melting/Freezing point:</b> N/A
<b>Boiling Point:</b> N/A	<b>Flashpoint:</b> N/A
<b>Ignition Temperature:</b> N/A	<b>Auto-ignition temperature:</b> N/A
<b>Explosion Limits:</b>	<b>Water solubility:</b> Insoluble
<b>Lower:</b> N/A	<b>Partition coefficient (n-octanol/water):</b> N/A
<b>Upper:</b> N/A	<b>Relative vapor density:</b> N/A
<b>Odor Threshold:</b> N/A	<b>Evaporation rate:</b> N/A
N/A = Not Available    N/D = Not Determined    Ca. = Approximate	

## 10. STABILITY AND REACTIVITY

**STABILITY:** This product is stable under recommended and normal storage conditions.

**HAZARDOUS POLYMERIZATION:** Will not occur under normal conditions.

**INCOMPATIBILITY:** Oxidizing Agents. Strong acids, acids. Strong bases, bases. Amines.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Phenolics due to combustion. Carbon monoxide due to combustion. Carbon dioxide due to combustion. Nitrogen oxides due to combustion. Irritating and toxic fumes at elevated temperatures.

**CONDITIONS TO AVOID:** Open Flame / Sparks / Sources of ignition. Heat.

## 11. TOXICOLOGICAL INFORMATION

**Component Toxicological Information:** (Acute)

**Likely routes of entry:** Skin Contact, Skin absorption, Ingestion, Inhalation

4, 4'-Isopropylidenediphenol-Epichlorohydrin Copolymer

LD50 Oral Rat 30,000 mg/kg

LD50 Dermal Rat >2,000 mg/kg

Not classified as a carcinogen by ACGIH, IARC or OSHA. Not listed by NTP.

**Sensitization:** This product is considered to be a skin sensitizer.

**Reproductive Toxicity:** No information concerning the effects of this product on the human reproductive system.

## 12. ECOLOGICAL INFORMATION

**Marine Pollutant/Ecotoxicity:** Not classified as a marine pollutant.

Alkyl Glycidyl Ether

EC50 Daphnia Magna 10 mg/l

**Environmental Fate:** May cause long term damage to the environment.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** The generation of waste should be avoided or minimized wherever possible. Do not dispose of with household waste. Do not dispose of in landfill. Do not allow contact with sewers or waterways. Comply with all Federal, State and Local regulations. Incinerate in admixture with fuel equipped with a scrubber to remove nitrogen oxides and carbon monoxide. Disposal of in permitted waste management facility if incineration or landfill is not practicable.

## 14. TRANSPORT INFORMATION

**DOT SHIPPING INFORMATION**

**DOT Proper Shipping Name:** Resin Compound- Not regulated

# TECHNICAL & SAFETY DATA SHEET

DOT Technical Name: N/A

DOT Hazard Class: N/A

DOT I.D. Number: N/A

Hazard Subclass: N/A

Packing Group: N/A

## IMDG

Technical Name: Environmentally hazardous substance, Liquid, N.O.S.

Hazard Class: 9

I.D. Number: UN3082

Hazard Subclass: N.A.

Packing Group: III

## INTERNATIONAL REGULATIONS:

**CANADIAN WHMIS:** This MSDS has been prepared in compliance with the hazard criteria of the Controlled Product Regulations and the MSDS contains the information required by those regulations.



CANADIAN WHMIS CLASS: D2B

## 15. REGULATORY INFORMATION

### U.S. FEDERAL REGULATIONS AS FOLLOWS-

**OSHA Hazard Communication Standard (29 CFR 1910.1200):** Hazardous by definition of Hazard Communication Standard.

Sensitizer.

### CERCLA/ Super Fund (40 CFR 117, 302):

CERCLA - SARA HAZARD CATEGORY:

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Immediate Health Hazard (Acute)      Delayed Health Hazard (Chronic)

### SARA Toxic Chemicals (40 CFR 372):

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

**TOXIC SUBSTANCES CONTROL ACT:** All chemicals in this compound are listed on the TSCA.

### NEW JERSEY RIGHT-TO-KNOW:

Chemical Name	CAS Number
Bisphenol A Epoxy Resin	25085-99-8
Treated Fumed Silica	67762-90-7
Acrylate Polymer	Proprietary

### PENNSYLVANIA RIGHT-TO-KNOW:

Chemical Name	CAS Number
Bisphenol A Epoxy Resin	25085-99-8

**California Proposition 65:** To the best of our knowledge, no Proposition 65 chemicals exist in this product.

## 16. OTHER INFORMATION

THE INFORMATION HEREIN HAS BEEN COMPILED FROM SOURCES BELIEVED TO BE RELIABLE AND IS ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, POLYMER NATION CHEMICAL CANNOT GIVE ANY GUARANTEES REGARDING INFORMATION FROM OTHER SOURCES, AND EXPRESSLY DOES NOT MAKE ANY WARRANTIES, NOR ASSUMES ANY LIABILITY FOR ITS USE.

# TECHNICAL & SAFETY DATA SHEET

## 1. PRODUCT AND COMPANY IDENTIFICATION

DATE PRINTED:	10/27/22
MSDS REF. No:	S-15/Part B/H3

**Product Name:** S-15 Part B  
**Product Code:** H3  
**Supplier/Manufacturer:** POLYMER NATION CHEMICAL  
1949 Swanson Court  
Gurnee, IL 60031  
(847) 774-5038

**EMERGENCY PHONE:** CHEMTREC, US (800) 424-9300 24-hours  
**ORIGINAL DATE ISSUED:** 3/18/13 **REVISION DATE:** 8/8/13

**Recommended end use:** Half of a two-component system designed for application and use as a protective coating.

## 2. HAZARDS IDENTIFICATION

**Acute Oral Toxicity, Category 2**  
**Skin Corrosion, Category 1C**  
**Serious Eye Damage, Category 2A**  
**Aspiration Hazard, Category 2**  
**Acute Aquatic Hazard, Category 3**



**SIGNAL WORD:** Danger

**Hazard-determining components of labeling:** Isophoronediamine

### Hazard Statements

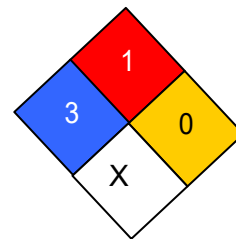
H317 May cause an allergic skin reaction  
H302 Harmful if swallowed  
H412 Harmful to aquatic life with long lasting effects  
H335 May cause respiratory irritation  
H314 Causes severe skin burns and eye damage

### Precautionary Statements

P273 Avoid Release to the Environment  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue Rinsing.  
P310 Immediately Call a POISON CENTER or doctor/physician.

HMIS RATING	
Health:	3
Flammability:	1
Reactivity:	0
Personal Protection:	X

### NFPA CODES



### Potential Health Effects:

**SKIN:** May cause irritation. Allergic reaction possible. May cause sensitization. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

**EYES:** May cause irritation. Corneal injury is likely.

**INHALATION:** Inhalation of vapors causes skin irritation of the respiratory tract and may cause adverse systemic effects.

**INGESTION:** Headache. Nausea. Vomiting. Death, unless treated promptly.

**CHRONIC HAZARDS:** Overexposure may cause lung damage. Liver Disorders. Kidney Disorders. Adverse respiratory effects. Adverse skin effects. Adverse eye effects.

# TECHNICAL & SAFETY DATA SHEET

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

This document is a pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). Where a proprietary ingredient is shown, the identity may be made available as provided in this standard. All components of this product are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

Chemical Name	Weight %	CAS Number
Isophoronediamine	98-100%	2855-13-2

## 4. FIRST AID MEASURES

**GENERAL ADVICE:** Consult a physician. Show this safety data sheet to physician in attendance.

**EYES:** Hold eyelids open and flush with plenty of water for at least 20 minutes. Get medical attention.

**SKIN:** Contact a physician. Remove product and flush with plenty of water for at least 20-30 minutes. Wash with soap and water.

**INHALATION:** Consult a physician. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**INGESTION:** Administer 3-4 glasses of milk or water. Never give anything by mouth to an unconscious person. DO NOT INDUCE VOMITING! Obtain medical care and hospital treatment immediately. Note to physicians: This product is highly injurious to all tissues, similar to that of ammonia or ammonia gas. Chemical pneumonitis, pulmonary edema, laryngeal edema and delayed scarring of the airway or other affected tissues may occur following exposure. There is no specific treatment. Clinical management is based on supportive treatment, which is similar to that for thermal burns.

## 5. FIRE FIGHTING MEASURES

**SUITABLE EXTINGUISHING MEDIA:** Alcohol Foam. Dry Chemical Foam. Carbon Dioxide. Water Fog.

**For safety reasons, unsuitable extinguishing agents:** Water spray.

**SPECIAL FIRE & UNUSUAL HAZARD:** May generate toxic or irritating combustion products. May generate carbon monoxide gas. May generate toxic nitrogen oxide gases. Vapors may travel along the ground to a source of ignition and flash back. Vapors may collect in closed spaces such as sewers, caves, or closed structures. Sudden reaction and fire may result if product is mixed with an oxidizing agent.

**SPECIAL FIREFIGHTING INSTRUCTIONS:** Firefighters should wear butyl rubber boots, gloves, and body suit as well as a self-contained breathing apparatus.

**ADDITIONAL INFORMATION:** Remove all ignition sources. Water runoff can cause environmental damage. Dike and collect water used to fight fire.

**HAZARDOUS COMBUSTION PRODUCTS formed under fire conditions:** Carbon oxides, nitrogen oxides, toxic fumes.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Use personal protective equipment. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe area. Ensure adequate ventilation. Provide adequate ventilation and wear a respirator.

**Action to Take for Spills/Leaks:** Prevent further leaking if safe to do so. Dike spill area. Flush area with water spray. Absorb spill with inert material (ex. dry sand or earth) and place in a metal chemical waste container for proper disposal. No action shall be taken involving any personal risk. Evacuate surrounding areas. Do not touch or walk-through spilled material. Avoid breathing vapor or mist. Avoid runoff into storm sewers and ditches which lead into waterways. Wear a self-contained breathing apparatus and appropriate personal protective equipment. Discharge into the environment must be avoided. If seepage into the environment has occurred, notify respective authorities.

See Section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7. HANDLING AND STORAGE

**HANDLING:** Handle in a well-ventilated workspace. Empty containers may contain explosive vapors. Flush empty containers with water to remove residual flammable liquid vapors. Ground all containers during material transfer. Avoid breathing dust, vapor, or mist. Avoid contact with eyes. Avoid contact with skin or clothing.

**STORAGE:** Keep from freezing. Keep container closed when not in use. Keep container in a cool, well-ventilated place.

Keep away from food, drink, and animal feed stuffs. Keep away from ignition sources and other incompatibilities.

Store in original container or a container very similar to that of the original.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Ventilation:** Good general ventilation should be sufficient to control airborne levels. Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.

**Personal Protection Equipment:**

**Respiratory Protection:** In poorly ventilated areas, a cartridge mask NIOSH approved for organic vapors is recommended. For emergency situations use self-contained breathing apparatus with pressure demand mode.

# TECHNICAL & SAFETY DATA SHEET



**Skin Protection:** Where contact is likely, wear chemical resistant gloves, rubber boots, and chemical safety goggles. Gloves should be tested for chemical resistance before reliable use. (penetration times, rates of diffusion and rate of degradation). Wear long sleeves and pants, exposing as little skin as possible.



**Eye Protection:** Wear chemical safety glasses with side shields or goggles. In the event of an emergency, use eye goggles with a full-face shield. DO NOT WEAR CONTACT LENSES when working with this material!!!

**Hygienic Practices:** Wash hands before eating. Remove contaminated clothing and wash before reuse. Follow all MSDS/label precautions even after container is emptied because they may retain product residues. Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin, and clothing.

**Exposure limits:**

Benzyl Alcohol Time Weighted Average (TWA): WEEL 10ppm 44.2 mg/m<sup>3</sup>

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Volatile Organic Content:</b> 59.5988816 g/L	<b>Solubility in Water:</b> Insoluble
<b>Color:</b> Gardener Scale 1-2	<b>Specific Gravity @ 20°C:</b> 1.0253768
<b>Odor:</b> Ammoniacal	<b>pH @ 100%:</b> >7
<b>Physical Appearance:</b> Cloudy.	<b>Melting/Freezing point:</b> N/A
<b>Boiling Point:</b> >392°F (>200°C)	<b>Flashpoint:</b> 95°C
<b>Ignition Temperature:</b> N/A	<b>Auto-ignition temperature:</b> N/A
<b>Explosion Limits:</b>	<b>Water solubility:</b> <0.1 g/L
<b>Lower:</b> N/A	<b>Partition coefficient (n-octanol/water):</b> N/A
<b>Upper:</b> N/A	<b>Relative vapor density:</b> N/A
<b>Odor Threshold:</b> N/A	<b>Evaporation rate:</b> N/A
N/A = Not Available    N/D = Not Determined    Ca. = Approximate	

## 10. STABILITY AND REACTIVITY

**STABILITY:** This product is stable under recommended and normal storage conditions.

**HAZARDOUS POLYMERIZATION:** Will not occur under normal conditions.

**INCOMPATIBILITY:** Oxidizing Agents. Organic Acids. Mineral Acids. Sodium Hypochlorite. Reactive Metals. Materials reactive with hydroxyl compounds. Reaction with peroxides may create explosions.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide due to combustion. Carbon dioxide due to combustion. Nitrogen oxides due to combustion. Irritating and toxic fumes at elevated temperatures. Ammonia. Nitric Acid. Aldehydes. Flammable hydrocarbon fragments.

**CONDITIONS TO AVOID:** Open Flame / Sparks / Sources of ignition. Heat.

## 11. TOXICOLOGICAL INFORMATION

**Component Toxicological Information:** (Acute)

Ingestion : LD50: 1000 mg/kg Rat Estimated

Inhalation : No data available on the product itself.

Inhalation-components:

LC50 (4h) : >4.178 mg/l Rat

LD50 Dermal Rabbit Est. >1000 mg/kg

Eye Irritation: Severe Eye Irritation

Acute Dermal Irritation/ Corrosion: Severe Skin Irritation

**CHRONIC HEALTH HAZARD:**

The product or a component may be mutagenic, the data is inconclusive. Rats exposed orally to 800 mg/kg benzyl alcohol for thirteen weeks exhibited CNS depression and histopathological changes in the brain, thymus, and skeletal muscles. The NOAEL was 400 mg/kg. No evidence of carcinogenicity was seen in a two-year study with rats and mice.

## 12. ECOLOGICAL INFORMATION

**Marine Pollutant/ Ecotoxicity:** Exposure at low concentrations may kill fish.

Toxicity to Fish: no information

Toxicity to Algae: no information

**Environmental Fate:** Low bioaccumulation potential



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## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** The generation of waste should be avoided or minimized wherever possible. Do not dispose of with household waste. Do not dispose of in landfill. Do not allow contact with sewers or waterways. Comply with all Federal, State and Local regulations. Incinerate in admixture with fuel equipped with a scrubber to remove nitrogen oxides and carbon monoxide. Disposal of in permitted waste management facility if incineration or landfill is not practicable.

## 14. TRANSPORT INFORMATION

### DOT SHIPPING INFORMATION

**DOT Proper Shipping Name:** Amines, Liquid, Corrosive, N.O.S.

**DOT Technical Name:** Amines, Liquid, Corrosive, N.O.S. (contains Isophoronediamine)

**DOT Hazard Class:** Class 8

**Hazard Subclass:** N.A.

**DOT I.D. Number:** UN2735

**Packing Group:** III

### IMDG

**Technical Name:** Amines, Liquid, Corrosive, N.O.S. (contains Isophoronediamine)

**Hazard Class:** Class 8

**Hazard Subclass:** N.A.

**I.D. Number:** UN2735

**Packing Group:** III

### INTERNATIONAL REGULATIONS:

**CANADIAN WHMIS:** This MSDS has been prepared in compliance with the hazard criteria of the Controlled Product Regulations and the MSDS contains the information required by those regulations.



**CANADIAN WHMIS CLASS:** D2B

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## 15. REGULATORY INFORMATION

### U.S. FEDERAL REGULATIONS AS FOLLOWS-

**OSHA Hazard Communication Standard (29 CFR 1910.1200):** Hazardous by definition of Hazard Communication Standard. Corrosive. Sensitizer.

### CERCLA/ Super Fund (40 CFR 117, 302):

CERCLA - SARA HAZARD CATEGORY:

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Immediate Health Hazard (Acute)    Delayed Health Hazard (Chronic)

### SARA Toxic Chemicals (40 CFR 372):

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372: **N.A.**

**TOXIC SUBSTANCES CONTROL ACT:** All chemicals in this compound are listed on the TSCA

### NEW JERSEY RIGHT-TO-KNOW/ PENNSYLVANIA RIGHT-TO-KNOW:

Chemical Name	CAS Number
Isophoronediamine	2855-13-2
Aliphatic Amine Adduct	Proprietary
Aliphatic Amine Blend	Proprietary
Treated Fumed Silica	67762-90-7

**California Proposition 65:** To the best of our knowledge, no Proposition 65 chemicals exist in this product.

## 16. OTHER INFORMATION

THE INFORMATION HEREIN HAS BEEN COMPILED FROM SOURCES BELIEVED TO BE RELIABLE AND IS ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, POLYMER NATION CHEMICAL CANNOT GIVE ANY GUARANTEES REGARDING INFORMATION FROM OTHER SOURCES, AND EXPRESSLY DOES NOT MAKE ANY WARRANTIES, NOR ASSUMES ANY LIABILITY FOR ITS USE.

# TECHNICAL & SAFETY DATA SHEET

**Product Name:** Spheriglass® Beads, Glass Beads, Crushed Glass

**Product Description:** Soda lime glass (beads/irregular-shaped particle powder)

## 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 16.1 Product identifier

Product Name Spheriglass® beads, Glass beads, Crushed glass

**16.2 Other means of identification** amorphous glass powder/spheres/1170

**16.3 Relevant identified uses of the substance or mixture and uses advised against Identified use(s)** Used as functional fillers and additives in various industrial applications, plastics, paints & coatings, composites and thermoset systems. **Also used as a sandblasting media that contains 0% Free Silica.**

### 16.4 Details of the supplier of the safety data sheet

Company Name: AGSCO Corporation

Address: 160 West Hintz Road

Wheeling Illinois 60090

Emergency number: 847-520-4455

Information number: 847-520-4455

Date prepared: November 2017

## 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

GHS Classification Not classified as dangerous for supply/use.

EC Classification Not classified as dangerous for supply/use.

Hazards summary Dust may cause irritation. Spilled material is slippery.

## 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	%W/W	CAS No.	EINECS No. / REACH Registration	EC Classification and Risk Phrases
Glass oxide; Glass	100	65997-17-3	2660460	Not applicable.

## 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

Eye Contact Irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. If symptoms persist, obtain medical attention.

Skin Contact Wash affected skin with plenty of water. If symptoms occur obtain medical attention.

Inhalation In case of accident by inhalation: remove casualty to fresh air and keep at rest. If symptoms develop, obtain medical attention.

Ingestion Do not induce vomiting. Get immediate medical advice/attention.

### 4.2 Most important symptoms and effects, both acute and delayed

Dust may cause irritation. Spilled material is slippery. Dust may cause discomfort and mild irritation.

# TECHNICAL & SAFETY DATA SHEET

## 5: FIRE-FIGHTING MEASURES

### 5.1 Extinguishing Media

Suitable Extinguishing Media

As appropriate for surrounding fire.

Unsuitable extinguishing Media

None known.

### 5.2 Special hazards arising from the substance or mixture

Non-combustible

## 6: ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

### 6.2 Methods and materials for containment and cleaning up

Wear suitable protective clothing. Wear eye/face protection.

Caution - spillages may be slippery. Avoid generation of dust. Sweep or preferably vacuum up and collect in suitable containers for recovery or disposal.

**6.3 Reference to other sections** Not applicable.

## 7: HANDLING AND STORAGE

**7.1 Precautions for safe handling** Avoid contact with eyes, skin and clothing. Avoid generation of dust. Wash thoroughly after handling. Wear protective equipment to comply with good occupational hygiene practice. Do not eat, drink or smoke at the work place.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed and dry.

### 7.3 Specific end use(s)

Not applicable.

## 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

SUBSTANCE. Glass oxide; Glass	Occupational Exposure Limits No Occupational Exposure Limit assigned. 15mg/m <sup>3</sup> total dust 5mg/m <sup>3</sup> respirable (Particulates Not Otherwise Regulated)
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### 8.2 Exposure controls

#### 8.2.1 Appropriate engineering controls

Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions.

#### 8.2.2 Personal Protection

Respiratory protection

Wear suitable respiratory protective equipment if working in confined spaces with inadequate ventilation or where there is any risk of the exposure limits being exceeded.

Eye and Face

Goggles.

Skin protection

Wear suitable protective clothing and gloves. For example cotton or rubber.

# TECHNICAL & SAFETY DATA SHEET

## 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	Glass Powder
White. Odor	Odorless.
Odor Threshold (ppm)	Not applicable.
pH (Value)	Not applicable.
Freezing Point (°C)	Not applicable.
Melting Point (°C)	Approximately 730°C
Boiling Point (°C)	Not applicable.
Flash Point (°C) [Closed cup]	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Non-combustible.
Vapor Pressure (mm Hg)	Not applicable.
Vapor Density (Air=1)	Not applicable.
Solubility (Water)	Insoluble.
Partition Coefficient	Not applicable.
Auto Ignition Point (°C)	Not applicable.
Decomposition Temperature (°C)	Not applicable.
Viscosity (mPa. s)	Not applicable.
Explosive properties	Not applicable.
Oxidizing Properties	Not applicable.

## 10: STABILITY AND REACTIVITY

<b>10.1 Reactivity</b>	Avoid contact with strong acids
<b>10.2 Chemical stability</b>	Stable.
<b>10.3 Possibility of hazardous reactions</b>	Not applicable.
<b>10.4 Conditions to avoid</b>	Not applicable.
<b>10.5 Hazardous decomposition product(s)</b>	None known.

## 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Acute toxicity	
Ingestion	The acute oral toxicity of this product has not been tested. A similar material was nontoxic to rats at 5,000 mg/kg.
Inhalation	Inhalation may cause irritation to the mucous membranes.
Skin Contact	Dust may cause mechanical irritation.
Eye Contact	Dust may cause mechanical irritation.
Sensitization	Not sensitizing.
Carcinogenicity	There are no known reports of carcinogenicity of non-fibrous glass. Components are not listed by IARC, NTP or OSHA as carcinogens.
Reproductive toxicity	No evidence of reproductive effects.

# TECHNICAL & SAFETY DATA SHEET

## 12: ECOLOGICAL INFORMATION

- 12.1 Toxicity** No environmental hazards have been reported or known.
- 12.2 Persistence and degradability** This material is persistent but inert in aquatic systems. It will not bioconcentrate up the food chain.
- 12.3 Results of PBT and vPvB assessment** Not classified as PBT or vPvB.
- 12.4 Other adverse effects** Not applicable

## 13: DISPOSAL CONSIDERATIONS

- 13.1 Waste treatment methods** Product as supplied: The waste is considered to be non hazardous. Disposal should be in accordance with local, state or national legislation.

## 14: TRANSPORT INFORMATION

- 14.1 Proper Shipping Name** NOT CLASSED AS DANGEROUS FOR TRANSPORT.

## 15: REGULATORY INFORMATION

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

TSCA Inventory Status: Reported/Included.

AICS Inventory Status: Reported/Included.

DSL/NDSL Inventory Status: Reported/Included.

There is no **CERCLA** Reportable Quantity for this material.

Contains no **SARA** Title III, Section 313 notification chemical present at or above the de minimus concentration.

German Water Hazard Classification VwVwS: WGK class 1 (low hazard to water).

HMIS: 0,0,0



## 16: OTHER INFORMATION

EC Classification No. 67/548/EEC: Not classified as dangerous for supply/use.

GHS Classification: Not classified as dangerous for supply/use.

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