Technical Data Sheet

F-01 Clear Epoxy Floor Coating

POLYMER NATION CHEMICAL COMPANY, LLC



Product Overview: F-01 combines our building block, nonylphenol-free, epoxy resin with our robust modified cycloaliphatic amine reactant. This combination achieves a remarkable workhorse resin that has good chemical, abrasion and impact resistance. It's low odor and low viscosity make it perfect for decorative flooring projects as well as industrial applications.

Uses: F-01 is most often used as a broadcast resin and topcoat for resinous concrete flooring projects but it also performs well as a slower curing clear primer, a stand alone concrete sealer and as a slower setting patching material when combined with PN 1324 or PN1329 aggregate.

Preparation: 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.

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

Description	Results	Notes
Kit Yield in Gallons	3, 15, 165	Special packaging is available based on size of order and time constraints
Number of Components	2	
Mix Ratio Liquids by Volume	2:1	It is always preferred to mix the entire kit, whenever possible, to avoid off-ratio mixtures
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	280	Warmer temperatures will reduce viscosity and lower temperatures will increase viscosity
Gel Time	32 min.	Warmer temperatures will decrease gel time and lower temperatures will increase gel time
Dry to Touch	4 Hours	Warmer temperatures will reduce time and colder temperatures will increase time
Through Dry	8 Hours	Warmer temperatures will reduce time and colder temperatures will increase time
Dry to Walk	12 Hours	Warmer temperatures will reduce time and colder temperatures will increase time
Dry to Lightly Use	24 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	D65	Warmer temperatures will increase hardness
Shore Hardness at 7 days	D78	Warmer temperatures will shorten time to reach full hardness
Gloss @ 60 Degree Angle	82-85	Applying material close to dew point will decrease gloss and may result in an amine blush
VOC's of Mixed Material	<50g/L	EPA Method 24
Color Scale per ASTM D1500	.5-1.0	Clear to slightly amber
Solids by Volume Mixed	100%	
Storage	60F-90F	Store material between 60-90 degrees F in a protected dry location.
Odor	Subtle	Measuring odor offensiveness is difficult so experience with chemicals has been consulted here
Application Thickness in Mils	As a primer 8-12. As a body coat 12-20. As a slurry coat 100-125. As a topcoat 10-16	
Disposal	Dispose of material, containers, solvents, etc., per Federal, State and local guideline, rules and laws	
Available Colors	Clear and Color Packs	
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 techniques. To make an epoxy patching material mix no more material than can be mixed and applied within the stated Gel time and add the selected aggregate until the desired thickness is achieved. Recoat within 24 hours. Clean tools with a solvent similar to Xylene or Acetone.	

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

PolymerNation.com

1. PRODUCT AND COMPANY IDENTIFICATION

DATE PRINTED: 6/29/2023 MSDS REF. No: F-01 Part A/E1

Product Name: F-01 Part A **Product Code:**

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: 3/21/13 **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 Toxic to Reproduction, Category 2 Aquatic Hazard (Long term) Category 3





SIGNAL WORD: Warning

Hazard-determining components of labeling: Tetrahydrofurfuryl alcohol

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

H631 Suspected of damaging fertility or the unborn child

Precautionary Statements

P273 Avoid Release to the Environment

P280 Wear protective gloves/ protective clothing/eye protection/face protection.

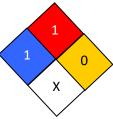
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue Rinsing.

P310 Immediately Call a POISON CENTER or doctor/physician.

P284 Wear respiratory protection

HMIS RATING		
Health:	1	
Flammability:	1	
Reactivity:	0	
Personal Protection:	Х	





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.

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

INGESTION: Headache. Nausea. Vomiting.

CHRONIC HAZARDS: This product contains nonylphenol which has been found by OSHA to be a teratogen.

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
Alkyl C12-C14 Glycidyl Ether	7-13%	68609-97-2
Tetrahydrofurfuryl alcohol	1-3%	97-99-4

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.

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.

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.

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 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. 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.

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

Volatile Organic Content: 9.0384742g/L	Solubility in Water: Insoluble
Color, form: Colorless, cloudy liquid	Specific Gravity @ 20°C: 1.1379970
Odor: Faint Epoxy Odor	pH @ 100%: N/A
Physical Appearance: Cloudy Liquid	Melting/Freezing point: N/A
Boiling Point: N/A	Flashpoint: N/A
Ignition Temperature: N/A	Auto-ignition temperature: N/A
Explosion Limits:	Water solubility: Insoluble
Lawren NI/A	Partition coefficient (n-octanol/water): N/A
Lower: N/A	Relative vapor density: N/A
Odor Threshold: N/A	Evaporation rate: 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 conditions. **HAZARDOUS POLYMERIZATION:** Will not occur under normal conditions. **INCOMPATIBILITY:** Oxidizing Agents. Strong bases, bases. Amines.

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.

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. Not classified as a carcinogen by ACGIH, NTP, OSHA or IARC. The substance is known to cause human aspiration toxicity hazards or has to be regarded as if it causes human respiration toxicity hazard. Does not cause skin sensitization.

Specific target organ toxicity: No data available

12. ECOLOGICAL INFORMATION

Marine Pollutant/Ecotoxicity: Harmful to aquatic life with long lasting effects.

Toxicity to fish:

Environmental Fate: Bioconcentration potential is low. Biodegradation under aerobic static laboratory conditions is below detectable limits.

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

DOT Technical Name: N/A

DOT Hazard Class: N/A
DOT I.D. Number: N/A
Packing Group: N/A

IMDG

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

Hazard Class: 9 Hazard Subclass: N.A.

I.D. Number: UN3082 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.

T

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)

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: **None.**

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

NEW JERSEY/ PENNSYLVANIA RIGHT-TO-KNOW:

Chemical Name	CAS Number
Bisphenol A Epoxy Resin	25085-99-8
Alkyl C12-C14 Glycidyl Ether	68609-97-2
Tetrahydrofurfuryl alcohol	97-99-4

California Proposition 65: Warning! This product <u>may contain</u> the following substance(s) is(are) known to the State of California to cause cancer, birth defects or other reproductive harm:

Benzene CAS # 71-43-2 <0.1% Toluene CAS # 108-88-3 <0.1%

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.

1. PRODUCT AND COMPANY IDENTIFICATION

DATE PRINTED: 6/29/2023

MSDS REF. No: F-01 Part B/H1

Product Name: F-01 Part B **Product Code**: H1

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: 3/15/13 REVISION DATE: 12/23/2014

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 4
Acute Dermal Toxicity, Category 4
Skin Corrosion, Category 1B
Serious Eye Damage, Category 1
Skin Sensitization, Category 1





SIGNAL WORD: Danger

Hazard-determining components of labeling: Amine mixture

Hazard Statements

H317 May cause an allergic skin reaction

H302 Harmful if swallowed H412 Harmful to aquatic life

H335 May cause respiratory irritation

H314 Causes severe skin burns and eye damage

Precautionary Statements

P273 Avoid Release to the Environment

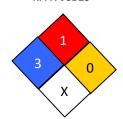
P280 Wear protective gloves/ protective clothing/eye protection/face protection.

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.

NFPA CODES

P310 Immediately Call a POISON CENTER or doctor/physician.

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



Potential Health Effects:

SKIN: 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.

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	<40%	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. Remove contaminated clothing and wash before reusing. If medical attention is not immediately available, continue to flush area for one hour. Cover wound with sterile dressing. Corticosteroid cream has been effective in treating skin irritation. **INHALATION:** Consult a physician. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give

oxvgen.

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.

MOST IMPORTANT SYMPTOMS/EFFECTS (acute and delayed) - Eye disease, skin disorders and allergies, and neurological disorders.

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.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Volatile Organic Content: 60.6028242	Solubility in Water: <0.1 g/L
Color: Colorless	Specific Gravity @ 20°C: 1.0122801
Odor: Ammoniacal	pH @ 100%: Alkaline
Physical Appearance: Colorless, liquid	Melting/Freezing point: N/A
Boiling Point: >392°F (>200°C)	Flashpoint: 203°F (95°C)
Ignition Temperature: N/A	Auto-ignition temperature: N/A
Explosion Limits:	Water solubility: <0.1 g/L
Lower: N/A	Partition coefficient (n-octanol/water): N/A
Upper: N/A	Relative vapor density: N/A
Odor Threshold: N/A	Evaporation rate: 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.

 $\textbf{CONDITIONS TO AVOID: } Open \ \mathsf{Flame} \ / \ \mathsf{Sparks} \ / \ \mathsf{Sources} \ \mathsf{of ignition}. \ \ \mathsf{Heat}.$

11. TOXICOLOGICAL INFORMATION

Component Toxicological Information: (Acute)

Ingestion: LD50: 1000 mg/kg Rat EstimatedInhalation: No data available on the product itself.Inhalation-components: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: Toxicity to Algae:

Environmental Fate: Low bioaccumulation potential

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. Not considered an environmental marine pollutant.

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

DOT I.D. Number: UN2735

Packing Group: III

IMDG

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

Hazard Class:Class 8Class:N.A.I.D. Number:UN2735UN2735Packing Group:

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.

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: **None.**

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

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.