

Safety Data Sheet

NOVOLAC COATING RESIN

SECTION 1: PRODUCT AND COMPANY INFORMATION

Manufacturer	Indcon, Inc. P.O. Box 8357, Greenville, SC 29604	Fax	Not Applicable
Telephone	864-298-8300	Product ID #	2402
Product Name(s)	NOVOLAC COATING RESIN	CAS Number	Mixture
Chemical Family	Epoxy Resin		
Emergency Contact / Number	24 HOUR CHEMTREC 800-424-9300		

SECTION 2: HAZARD IDENTIFICATION



Hazards

Sensitization, Skin	Category 1 – May cause an allergic skin reaction
Skin Corrosion/Irritation	Category 2 – Causes skin irritation
Serious Eye Damage/Eye Irritation	Category 2A – Causes serious eye irritation
Hazardous to the aquatic environment, acute hazard	Category 2 – Toxic to aquatic life
Hazardous to the aquatic environment, long-term hazard	Category 2 – Toxic to aquatic life with long lasting effects

Signal Word WARNING

Precautionary Statements

Avoid breathing fumes, vapors or spray. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective eye and face protection, gloves and clothing.

IF ON SKIN: Wash with soap and water.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if easy to do so - continue rinsing.

If eye irritation persists: Get medical advice or attention.

If skin irritation or a rash occurs: Get medical advice/attention.

Take off contaminated clothing and wash before reuse. Collect spillage. Dispose of contents/container to an approved waste disposal plant.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS#	Component Range
Epoxy Novolac Resin	28064-14-4	80 – 90
Alkyl (C ₁₂₋₁₄) glycidyl ether	68609-97-2	5 – 10

SECTION 4: FIRST AID MEASURES

Eye Contact

Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

Skin Contact

Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands.

Ingestion

Remove victim to fresh air. If unconscious, place in a comfortable position and get medical attention immediately. Never give anything by mouth to an unconscious person. If conscious wash out mouth with water and give small quantities of water to drink. Stop if the exposed person feels sick. Do not induce vomiting unless directed to do so by medical personnel because of the danger of aspiration into the lungs. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe.

Safety Data Sheet

NOVOLAC COATING RESIN

Inhalation

Remove victim to fresh air and keep at rest in a comfortable position for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Provide artificial respiration by trained personnel if victim is not breathing, breathing is irregular or respiratory arrest occurs. It may be dangerous for the rescuer to give mouth-to-mouth resuscitation. Get medical attention or advice.

SECTION 5: FIREFIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foams (AIC type) are preferred. Water fog or fine spray, dry chemical or carbon dioxide fire extinguishers. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective. Use water fog to cool fire-exposed containers, structures and to protect personnel. Do not use a direct water stream which may spread fire.

Special Firefighting Procedures

Clear fire area of unprotected and untrained personnel. Do not enter confined fire space without full equipment and a positive pressure NIOSH approved self-contained breathing apparatus.

Unusual Firefighting Hazards

Smoke from the fire may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include carbon dioxide, carbon monoxide and toxic gases.

SECTION 6: ACCIDENTAL RELEASE MEASURES

See Section 8 for Personal Protection Measures

Personal Precautions

Isolate release area and keep unnecessary or untrained people away. Spilled material may be slippery. Avoid contact with spilled material.

Environmental Precautions

Contain spill if it can be done with minimal risk. Prevent liquid from entering drains, sewers or waterways. Advise EPA, state or local agencies as required.

Methods for Cleaning Up

Contain spilled material if possible to do safely. Absorb with materials such as sand, polypropylene or polyethylene fiber products. Remove residual with soap and hot water. Collect in suitable and properly labeled containers. Residual can be removed with solvent. Use of large amounts of solvents is not recommended for clean-up unless the recommended exposure guidelines and safe handling practices for the specific solvent are known and followed. Consult solvent Safety Data Sheet for handling information and exposure guidelines.

SECTION 7: HANDLING AND STORAGE

See Section 8 for Personal Protection Measures

Handling

Keep in closed, marked containers. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Do not smoke, eat or drink while using product. Wash thoroughly after handling, before use of restroom or end of work assignment. Avoid use of electric band heaters. Failures of electric band heaters have been reported to cause drums of liquid epoxy resin to explode and catch fire. Application of a direct flame to a container of liquid epoxy resin can also cause explosion and/or fire.

Storage

Keep away from heat, sparks and flame. Keep container closed when not in use.

SECTION 8: EXPOSURE CONTROL AND PERSONAL PROTECTION

Exposure Limits

Component Name	ACGIH TLV-TWA	OSHA PEL-TWA
Not Applicable		

Engineering Controls

Use appropriate ventilation to maintain good quality air conditions. Have eye wash stations and safety showers readily available.

Eye and Face Protection

Wear safety glasses with side shields (or goggles) and a face shield.

Skin Protection

Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield as appropriate to the work assignment.

Safety Data Sheet

NOVOLAC COATING RESIN

Respiratory Protection

Use NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister where airborne concentrations are unknown or expected to be high. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical State	Clear viscous liquid	Flash Point	200 °F
Specific Gravity (Water=1)	1.16	Upper Flammability Limits	Not Determined
Evaporation Rate	Not Determined	Lower Flammability Limits	Not Determined
pH	Not Applicable	Auto-ignition Temperature	Not Determined
Solubility in Water	Negligible	Decomposition Temperature	Not Determined
Odor	Slightly aromatic	Vapor Pressure	Not Determined
Odor Threshold	Not Determined	Vapor Density (Air=1)	>1
Melting/Freezing Point	Not Determined	Partition Coefficient (n-octanol/water)	Not Determined
Boiling Range	560 – 570 °F	Viscosity (cSt, 40 °C)	Not Determined
Initial Boiling Point	Not Determined	Critical Temperature	Not Determined

Note: Physical and chemical properties are provided for safety, health and environmental considerations and do not fully represent product specifications. Those should be requested separately.

SECTION 10: STABILITY AND REACTIVITY

Stability

Stable under normal conditions of storage and handling.

Conditions to Avoid

Avoid contact with amines, anhydrides, acids and oxidizers.

Hazardous Decomposition / Byproducts

Unlikely to occur except in the event of fire. Expected by-products in incomplete pyrolysis or combustion are mainly phenolics, carbon monoxide and water. Thermal decomposition products should therefore be treated as potentially hazardous substances and appropriate precautions should be taken.

Hazardous Polymerization

Will not occur under normal conditions.

Polymerization Conditions to Avoid

Not Applicable

SECTION 11: TOXICOLOGICAL INFORMATION

Specific toxicity tests have not been conducted on this mixture. In accordance with OSHA's Hazard Communication Standard 1910.1200, this mixture is assumed to have the same health hazards as its significant components.

Eye Contact

May cause irritation, watering or redness.

Skin Contact

Prolonged or repeated contact may cause skin irritation with local redness.

Ingestion

The toxicity based on that of the major ingredients is expected to be low.

Inhalation

Room temperature material has a low vapor pressure and little likelihood of being inhaled; heated material may cause respiratory irritation.

Target Organ Effects

None expected.

Chronic Effects

None known

Carcinogenicity

Components at levels above 0.1% are not found to be carcinogens by NTP, OSHA or IARC.

Safety Data Sheet

NOVOLAC COATING RESIN

SECTION 12: ECOLOGICAL INFORMATION

Do not allow material to contact soil, enter sewers or any body of water.

Ecotoxicity The major ingredient is moderately toxic to aquatic organisms on an acute basis; also potentially toxic to aquatic organisms with long term adverse effects.

Mobility Not Determined

Degradability Components of this product may persist in the environment.

Bioaccumulation Not Determined

SECTION 13: DISPOSAL CONSIDERATION

Dispose of this product in compliance with all applicable federal, state and local regulations. Empty containers may contain residues.

SECTION 14: TRANSPORT INFORMATION

Proper Shipping Name Not Regulated

SECTION 15: REGULATORY INFORMATION

Federal

TSCA Status

All components are listed in the TSCA inventory

SARA 311/312 Reporting Categories

Acute hazard

SARA 313 Reportable Ingredients

Alkyl (C12-14) glycidyl ether	CAS 68609-97-2	5 – 10 %
-------------------------------	----------------	----------

State Lists

Pennsylvania Right-to-Know – Components not listed

California Proposition 65 – Components not listed

SECTION 16: OTHER INFORMATION

HMIS Rating 2-1-1

Department Issuing SDS Health and Safety

Disclaimer

This information is correct and accurate to the best of Indcon's knowledge; however, Indcon Co. assumes no liability whatsoever for the continued accuracy and completeness of the information contained herein. For specific information regarding occupational safety health standards please refer to the Code of Federal Regulations Title 29 and all relevant state regulations and laws. The user has the sole responsibility for the final determination of suitability of any material. All materials may present known and unknown health hazards and should be used with caution. With regard to his or her particular use the user should be sure that he or she has all current and relevant data for their particular use. CAUTION: Always keep out of the reach of children.

Safety Data Sheet

NOVOLAC COATING HARDENER

SECTION 1: PRODUCT AND COMPANY INFORMATION

Manufacturer	Indcon, Inc. P.O. Box 8357, Greenville, SC 29604	Fax	Not Applicable
Telephone	864-289-8300	Product ID #	2403
Product Name(s)	NOVOLAC COATING HARDENER	CAS Number	Mixture
Chemical Family	Epoxy Hardener		
Emergency Contact / Number	24 HOUR CHEMTREC 800-424-9300		

SECTION 2: HAZARD IDENTIFICATION



Hazards

Acute Toxicity, oral	Category 4 – Harmful if swallowed
Acute Toxicity, skin	Category 3 – Toxic in contact with skin
Skin Corrosion/Irritation	Category 1B – Causes severe skin burns and eye damage
Serious Eye Damage/Eye Irritation	Category 1 – Causes serious eye damage
Sensitization, Skin	Category 1 – May cause an allergic skin reaction
Hazardous to the aquatic environment, long-term hazard	Category 3 – Harmful to aquatic life with long lasting effects

Signal Word DANGER

Precautionary Statements

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe fumes or vapors. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves and clothing, eye and face protection. Use personal protective equipment as required.

IF exposed or concerned: get medical advice/attention. Call a POISON CENTER or doctor/physician if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so - continue rinsing. Immediately call a POISON CENTER or doctor/physician.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water, shower.

IF skin irritation or a rash occurs: Get medical advice/attention.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Wash contaminated clothing before reuse. Collect spillage. Store locked up. Dispose of contents/container to an approved waste disposal plant.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS#	Component Range
Isophronediamine	2855-13-2	25 – 50
Benzyl Alcohol	100-51-6	25 - 50
Bisphenol A Epoxy Resin	25085-99-8	5 - 10

SECTION 4: FIRST AID MEASURES

Eye Contact

Can cause serious eye damage. Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

Skin Contact

Can cause severe burns. Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. Wash clothing before reuse.

Safety Data Sheet

NOVOLAC COATING HARDENER

Ingestion

May cause burns to mouth, throat and stomach. Do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Inhalation

Vapors may be irritating or corrosive. Remove victim to fresh air and keep at rest in a comfortable position for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Provide artificial respiration by trained personnel if victim is not breathing, breathing is irregular or respiratory arrest occurs. It may be dangerous for the rescuer to give mouth-to-mouth resuscitation. Get medical attention or advice.

SECTION 5: FIREFIGHTING MEASURES

Suitable Extinguishing Media

Alcohol foam, water fog, dry chemical or carbon dioxide fire extinguishers. Use water fog to cool fire-exposed containers, structures and to protect personnel. Do not use a direct water stream which may spread fire.

Special Firefighting Procedures

Clear fire area of unprotected and untrained personnel. Do not enter confined fire space without full equipment and a positive pressure NIOSH approved self-contained breathing apparatus.

Unusual Firefighting Hazards

Smoke from the fire may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include carbon dioxide, carbon monoxide and toxic gases.

SECTION 6: ACCIDENTAL RELEASE MEASURES

See Section 8 for Personal Protection Measures

Personal Precautions

Isolate release area and keep unnecessary or untrained people away. Avoid contact with spilled material.

Environmental Precautions

Contain spill if it can be done with minimal risk. Prevent liquid from entering drains, sewers or waterways. Advise EPA, state or local agencies as required.

Methods for Cleaning Up

Contain spilled material if possible to do safely. Absorb with materials such as sand, polypropylene or polyethylene fiber products. Collect in suitable and properly labeled containers for disposal or reuse.

SECTION 7: HANDLING AND STORAGE

See Section 8 for Personal Protection Measures

Handling

Keep in closed, marked containers. Avoid contact with eyes and skin. Do not smoke, eat or drink while using product. Wash thoroughly after handling, before use of restroom or end of work assignment.

Storage

Keep away from heat, sparks and flame. Keep container closed when not in use.

SECTION 8: EXPOSURE CONTROL AND PERSONAL PROTECTION

Exposure Limits

Component Name	ACGIH TLV-TWA	OSHA PEL-TWA
Not Applicable		

Engineering Controls

Use appropriate ventilation to maintain good quality air conditions. Have eye wash stations and safety showers readily available.

Eye and Face Protection

Wear safety glasses with side shields (or goggles) and a face shield.

Skin Protection

Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield as appropriate to the work assignment.

Respiratory Protection

Use NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister where airborne concentrations are unknown or expected to be high. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Safety Data Sheet

NOVOLAC COATING HARDENER

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical State	Clear liquid	Flash Point (PMCC)	235 °F
Specific Gravity (Water=1)	1.01	Upper Flammability Limits	Not Determined
Evaporation Rate	<Butyl acetate	Lower Flammability Limits	Not Determined
pH	Not Applicable	Auto-ignition Temperature	572 °F
Solubility in Water	Partial	Decomposition Temperature	Not Determined
Odor	Strong ammonia	Vapor Pressure	0.1 HPa
Odor Threshold	Not Determined	Vapor Density (Air=1)	>1
Melting/Freezing Point	Not Determined	Partition Coefficient (n-octanol/water)	Not Determined
Boiling Range	401 – 405 °F	Viscosity (cSt, 40 °C)	Not Determined
Initial Boiling Point	Not Determined	Critical Temperature	Not Determined

Note: Physical and chemical properties are provided for safety, health and environmental considerations and do not fully represent product specifications. Those should be requested separately.

SECTION 10: STABILITY AND REACTIVITY

Stability

Stable under normal conditions of storage and handling.

Conditions to Avoid

Avoid contact with epoxies, isocyanates, acids.

Hazardous Decomposition / Byproducts

Unlikely to occur except in the event of fire. Nitrogen and carbon oxides may be formed in the event of overheating or incomplete combustion.

Hazardous Polymerization

Will not occur under normal conditions.

Polymerization Conditions to Avoid

Not Applicable

SECTION 11: TOXICOLOGICAL INFORMATION

Specific toxicity tests have not been conducted on this mixture. In accordance with OSHA's Hazard Communication Standard 1910.1200, this mixture is assumed to have the same health hazards as its significant components.

Eye Contact

Product is corrosive to the eyes.

Skin Contact

Product is corrosive to the skin.

Ingestion

Harmful if swallowed.

Inhalation

May give off gas, vapor that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

Carcinogenicity

Components at levels above 0.1% are not found to be carcinogens by NTP, OSHA or IARC.

SECTION 12: ECOLOGICAL INFORMATION

Do not allow material to contact soil, enter sewers or any body of water.

Ecotoxicity Harmful to aquatic organisms with long term effects

Mobility Not Determined

Degradability Not Determined

Bioaccumulation Not Determined

Safety Data Sheet

NOVOLAC COATING HARDENER

SECTION 13: DISPOSAL CONSIDERATION

Dispose of this product in compliance with all applicable federal, state and local regulations. Empty containers may contain residues.

SECTION 14: TRANSPORT INFORMATION

Proper Shipping Name UN1719, Caustic Alkali Liquid N.O.S. (Modified Cycloaliphatic Polyamine), Class 8, PG III

SECTION 15: REGULATORY INFORMATION

Federal

TSCA Status

All components are listed in the TSCA inventory

SARA 311/312 Reporting Categories

Acute hazard

SARA 313 Reportable Ingredients

None

State Lists

Pennsylvania Right-to-Know – Components not listed

New Jersey Right-to-Know – Components not listed

California Proposition 65 – Components not listed

SECTION 16: OTHER INFORMATION

HMIS Rating 4-1-0

Department Issuing SDS Health and Safety

Disclaimer

This information is correct and accurate to the best of Indcon's knowledge; however, Indcon Co. assumes no liability whatsoever for the continued accuracy and completeness of the information contained herein. For specific information regarding occupational safety health standards please refer to the Code of Federal Regulations Title 29 and all relevant state regulations and laws. The user has the sole responsibility for the final determination of suitability of any material. All materials may present known and unknown health hazards and should be used with caution. With regard to his or her particular use the user should be sure that he or she has all current and relevant data for their particular use. CAUTION: Always keep out of the reach of children.