SAFETY DATA SHEET

M49021 - ANSI - EN



PENACOLITE® RESIN I-168-L

SDS No.: M49021 **SDS Revision Date**: 14-Apr-2016

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Identification: INDSPEC Chemical Corporation

Subsidiary of Occidental Petroleum Corporation

5005 LBJ Freeway P.O. Box 809050

Dallas, Texas 75380-9050

Manufacturing Address: INDSPEC Chemical Corporation

Subsidiary of Occidental Petroleum Corporation

133 Main Street

Petrolia, Pennsylvania 16050

USA

Information: (+1) 412-826-3666

24 Hour Emergency Telephone

Number:

1-800-733-3665 or 1-972-404-3228 (U.S.); CHEMTREC (U.S.): 1-800-424-9300; CHEMTREC Contract No: CCN16186; CANUTEC (Canada): 1-613-996-6666

MEDICAL EMERGENCIES: 1-800-456-7566

To Request an SDS: MSDS@oxy.com or 1-972-404-3245

Customer Service: 1-800-221-6514 or 1-972-404-3700

Product Identifier: PENACOLITE® RESIN I-168-L

Product Use: RFL dipping, Fabric processing

Uses Advised Against: None identified

Chemical Family: Modified Diisocyanate and Resorcinol-Formaldehyde Polymer

SDS No.: M49021 **SDS Revision Date**: 14-Apr-2016

SECTION 2. HAZARDS IDENTIFICATION

OSHA REGULATORY STATUS: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

EMERGENCY OVERVIEW:

Color: Dark orange-red

Physical State: Liquid

Odor: Slight phenolic odor

Signal Word: DANGER

MAJOR HEALTH HAZARDS: CAUSES SERIOUS EYE DAMAGE. MAY BE HARMFUL IN CONTACT WITH SKIN. MAY BE ABSORBED THROUGH THE SKIN. MAY BE HARMFUL IF SWALLOWED. CAUSES MILD SKIN IRRITATION. MAY CAUSE AN ALLERGIC SKIN REACTION.

AQUATIC TOXICITY: May cause long-term adverse effects in the aquatic environment.

PRECAUTIONARY STATEMENTS: Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Wear protective gloves, protective clothing, eye, and face protection. Wash thoroughly after handling. Do not take internally. Avoid breathing vapor, mist, or spray. Do not eat, drink or smoke in areas where this material is used.

ADDITIONAL HAZARD INFORMATION: Not for use or storage in or around home. Good hygiene and safety practices should be used when handling and working with this material. Good hygiene practices include but are not limited to: wearing suitable gloves and/or eye protection; washing hands and affected skin immediately after handling, before breaks, and at the end of the workday; regularly cleaning work area and clothing; etc.

GHS CLASSIFICATION:

GHS: CONTACT HAZARD - EYE:	Category 1 - Causes serious eye damage		
GHS: SENSITIZATION HAZARD:	Skin Sensitizer Category 1 - May cause an allergic skin		
	reaction		

Unknown Acute Inhalation Toxicity:

There is no acute inhalation toxicity data available for this material. 100% of this product consists of ingredient(s) of unknown acute inhalation toxicity.

GHS SYMBOL: Exclamation mark, Corrosive

SDS No.: M49021 **SDS Revision Date**: 14-Apr-2016





GHS SIGNAL WORD: DANGER

GHS HAZARD STATEMENTS:

GHS - Health Hazard Statement(s)

- · Causes serious eye damage
- · May cause an allergic skin reaction

GHS - Precautionary Statement(s) - Prevention

- Wear eye protection/face protection
- · Wear protective gloves and protective clothing
- · Contaminated work clothing should not be allowed out of the workplace
- · Avoid breathing mist, vapors, or spray

GHS - Precautionary Statement(s) - Response

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- Immediately call a POISON CENTER or doctor/physician
- IF ON SKIN: Wash with plenty of water
- If skin irritation or rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse

GHS - Precautionary Statement(s) - Storage

• There are no Precautionary-Storage phrases assigned

GHS - Precautionary Statement(s) - Disposal

• Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations

Hazards Not Otherwise Classified (HNOC)

None Known

See Section 11: TOXICOLOGICAL INFORMATION

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Percent [%]	CAS Number
Resorcinol Formaldehyde Polymer	40- 50	24969-11-7
Water	40 - 50	7732-18-5
Formaldehyde, polymer with 1,3- benzenediol and 1,1'-methylenebis [isocyanatobenzene*]	1 - 12	1067881-45-1

SDS No.: M49021 **SDS Revision Date**: 14-Apr-2016

Resorcinol	1 - 12	108-46-3
Methanol	0 -1.5	67-56-1

Notes: * No residual diisocyanate (e.g. MDI in formulation).

SECTION 4. FIRST AID MEASURES

INHALATION: If inhaled and adverse effects occur, remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, contact poison control center or doctor/physician.

SKIN CONTACT: Wipe off excess chemical and flush contaminated areas with plenty of water. If skin irritation or rash occurs, get medical advice/attention.

EYE CONTACT: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately contact a physician. Immediate and thorough decontamination of the eye is essential followed by ophthalmological assessment. Follow protocol for corrosive injury.

INGESTION: If swallowed, rinse mouth. Contact a Poison Center, or a doctor/physician, or get medical attention if you feel unwell.

Most Important Symptoms/Effects (Acute and Delayed):

Acute Symptoms/Effects: Listed below.

Inhalation (Breathing): Respiratory System Effects: Inhalation of this material may cause irritation, coughing. **Skin:** Skin Irritation. Exposure to skin may cause redness, mild irritation. Free resorcinol may penetrate the skin and cause systemic toxicity. This material contains less than 12% free resorcinol. May cause an allergic skin reaction

Eye: Eye Irritation. Eye exposure may cause irritation and burns to the eyelids, conjunctivitis, corneal edema, and iritis.

Ingestion (Swallowing): Gastrointestinal System Effects: Exposure by ingestion may cause irritation, nausea, and vomiting. May cause local tissue damage to esophagus and stomach such as burning, inflammation. Free resorcinol is well absorbed by the gastrointestinal (GI) tract, and this route of exposure can lead to systemic effects such as unconsciousness, respiratory failure, seizures, leukocytosis and severe metabolic acidosis, and methemoglobinemia. Alterations in liver and kidney functions have been reported in severe poisonings. This material contains less than 12% free resorcinol.

Delayed Symptoms/Effects:

- No delayed / chronic effects have been identified

Interaction with Other Chemicals Which Enhance Toxicity: None known.

Medical Conditions Aggravated by Exposure: May aggravate preexisting conditions such as: eye disorders that decrease tear production or have reduced integrity of the eye; skin disorders that compromise the integrity of the skin; and respiratory conditions including asthma and other breathing disorders.

Protection of First-Aiders: Protect yourself by avoiding contact with this material. Avoid contact with skin and eyes. Use personal protective equipment. Refer to Section 8 for specific personal protective equipment recommendations. Do not ingest.

SDS No.: M49021 **SDS Revision Date**: 14-Apr-2016

Notes to Physician: Treat symptomatically. There is no antidote. This material induces mild local irritation. For ingestion, consider evaluation of local mucosal irritation, and erosion.

SECTION 5. FIRE-FIGHTING MEASURES

Fire Hazard: Negligible fire hazard.

Explosive properties: Closed containers may explode or rupture when exposed to extreme heat (fire).

Extinguishing Media: Use dry chemical, carbon dioxide, foam, or water spray

Fire Fighting: Wear complete fire service protective equipment, including full-face MSHA/NIOSH approved self-contained breathing apparatus. Use water to cool fire-exposed container/structure/protect personnel.

Component	Immediately Dangerous to Life/ Health (IDLH)		
Methanol	6000 ppm IDLH		
67-56-1			

Hazardous Combustion Products: Oxides of carbon (Carbon monoxide, Carbon dioxide)

Sensitivity to Mechanical

Impact:

Not sensitive.

Sensitivity to Static Discharge: Not sensitive.

Lower Flammability Level (air): Not applicable

Upper Flammability Level (air): Not applicable

Flash point: >100 °C (>212 °F)

Auto-ignition Temperature: Not applicable

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Keep unnecessary and unprotected personnel from entering the area. Stop leak if possible without personal risk. Stay upwind. Do not get in eyes. Do not breathe dust, fume, gas, mist, vapors, or spray. Avoid contact with skin and clothing. Wear appropriate personal protective equipment recommended in Section 8, Exposure Controls / Personal Protection, of the SDS.

Methods and Materials for Containment and Cleaning Up:

Contain spill. Small spills: Take up with sand or other noncombustible absorbent material. Flush area with water. Dike large spills for later disposal. Contain runoff from fire control and dilution water.

SDS No.: M49021 **SDS Revision Date**: 14-Apr-2016

Environmental Precautions:

Keep out of water supplies and sewers. Releases should be reported, if required, to appropriate regulatory agencies. The US EPA has issued a Significant New Use Rule (SNUR) for this substance under 40 CFR Part 721 with regard to no release to water. SEE SECTION 13 FOR MORE INFORMATION.

SECTION 7. HANDLING AND STORAGE

General: Not for use or storage in or around the home. Do not use until the manufacturer's precautions have been read/understood.

Precautions for Safe Handling:

Avoid prolonged or repeated breathing of vapor, mist, spray. Avoid contact with skin and eyes. Wash exposed skin thoroughly after contact and before eating, drinking, using tobacco products or restrooms. Observe good personal hygiene practices and recommended procedures. Wear personal protective equipment as described in Exposure Controls/Personal Protection (Section 8) of the SDS.

Safe Storage Conditions:

Keep container tightly closed and properly labeled. Store in a cool, well-ventilated area away from possible sources of ignition. Protect from physical damage. Keep containers closed when material is not in use. Keep away from food, drink and animal feed. Maintain good housekeeping. Keep separated from incompatible substances (see below or Section 10 of the Safety Data Sheet).

Incompatibilities/ Materials to Avoid:

Reaction with formaldehyde is mildly exothermic

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Regulatory Exposure Limit(s): As listed below.

 Component
 OSHA Final PEL TWA
 OSHA Final PEL STEL
 OSHA Final PEL STEL

 Methanol 67-56-1
 200 ppm 260 mg/m³
 ---- ----

OEL: Occupational Exposure Limit; OSHA: United States Occupational Safety and Health Administration; PEL: Permissible Exposure Limit; TWA: Time Weighted Average; STEL: Short Term Exposure Limit

NON-REGULATORY EXPOSURE LIMIT(S): Listed below for the product components that have advisory (non-regulatory) occupational exposure limits (OEL's) established.

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Component	ACGIH TWA	ACGIH STEL	ACGIH Ceiling	OSHA TWA	OSHA STEL	OSHA Ceiling
				(Vacated)	(Vacated)	(Vacated)
Resorcinol	10 ppm	20 ppm		10 ppm	20 ppm	
				45 mg/m ³	90 mg/m ³	
Methanol	200 ppm	250 ppm		200 ppm	250 ppm	
				260 mg/m ³	325 mg/m ³	

SDS No.: M49021 **SDS Revision Date**: 14-Apr-2016

- The Non-Regulatory United States Occupational Safety and Health Administration (OSHA) limits, if shown, are the Vacated 1989 PEL's (vacated by 58 FR 35338, June 30, 1993).

- The American Conference of Governmental Industrial Hygienists (ACGIH) is a voluntary organization of professional industrial hygiene personnel in government or educational institutions in the United States. The ACGIH develops and publishes recommended occupational exposure limits each year called Threshold Limit Values (TLVs) for hundreds of chemicals, physical agents, and biological exposure indices.

Additional Advice:

- 1. Good hygiene and safety practices should be used when handling and working with this material
- 2. Good hygiene practices include but are not limited to: wearing suitable gloves and/or eye protection; washing hands and affected skin immediately after handling, before breaks, and at the end of the workday; regularly cleaning work area and clothing; etc.

ENGINEERING CONTROLS: Provide sufficient general/local exhaust ventilation in pattern/volume to control inhalation exposures below applicable exposure limits.

PERSONAL PROTECTIVE EQUIPMENT:

Eye Protection: Wear safety glasses with side-shields. If eye contact is likely, wear chemical resistant safety goggles and/or face-shield when appropriate. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin and Body Protection: As a good hygiene practice, wear protective clothing to minimize skin contact such as standard industrial work clothes, coveralls, safety footwear. In dusty areas, wear necessary resistant protective apparel, including necessary head, hand, and foot protection. Contaminated clothing should be removed and laundered before reuse.

Hand Protection: As a good hygiene practice, wear appropriate chemical resistant gloves. Consult a glove supplier for assistance in selecting an appropriate chemical resistant glove.

Protective Material Types:

Butyl rubber, Natural rubber, Neoprene, Nitrile, Polyvinyl chloride (PVC), Tyvek®

Respiratory Protection: Not required under normal use conditions. A NIOSH/MSHA approved respirator with air purifying organic vapor cartridge/canister with particulate filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, or when symptoms have been observed that are indicative of overexposure. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

Component	Immediately Dangerous to Life/ Health (IDLH)
Methanol	6000 ppm IDLH
67-56-1	

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Color: Dark orange-red

SDS No.: M49021 **SDS Revision Date**: 14-Apr-2016

Odor: Slight phenolic odor Odor Threshold [ppm]: No data available.

Molecular Weight: NA/mixture

Chemical Family: Modified Diisocyanate and Resorcinol-Formaldehyde Polymer

Boiling Point/Range: 100 °C (212 °F)
Freezing Point/Range: No data available.
Melting Point/Range: Not applicable to liquids

Vapor Pressure: <20 mmHg
Vapor Density (air=1): No data available
Relative Density/Specific Gravity 1.20 @ 25 °C

(water=1):

Density: No data available **Water Solubility:** Appreciable

pH: 7 - 8

VOC Content (%):

Volatility:

Evaporation Rate (ether=1):

Partition Coefficient

No data available
No data available
No data available

(n-octanol/water):

Flash point: >100 °C (>212 °F)
Flammability (solid, gas): No data available
Lower Flammability Level (air): Not applicable
Upper Flammability Level (air): Not applicable
Auto-ignition Temperature: Not applicable

Viscosity: 20 - 30 poise @ 23°C

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal temperatures and pressures. Reaction with formaldehyde is mildly exothermic.

Chemical Stability: Stable at normal temperatures and pressures.

Possibility of Hazardous Reactions: Closed containers may explode or rupture when exposed to extreme heat

(fire).

Conditions to Avoid: (e.g., static discharge, shock, or vibration) -. None known.

Incompatibilities/ Materials to Avoid: Reaction with formaldehyde is mildly exothermic.

Hazardous Decomposition Products: Oxides of carbon (Carbon monoxide, Carbon dioxide)

Hazardous Polymerization: Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

IRRITATION DATA: As listed below

SDS No.: M49021 **SDS Revision Date**: 14-Apr-2016

Standard Draize (Eye):

Score - 25.3 @ 48 hrs. (Rabbit)

Standard Draize (Skin):

Score - 0.3 (Rabbit - 24 hrs.)

TOXICITY DATA:

PRODUCT TOXICITY DATA: PENACOLITE® RESIN I-168-L

LD50 Oral:	LD50 Dermal:	LC50 Inhalation:
> 2,000 mg/kg (Rat)	>2000 mg/kg (Rabbit)	No data available

COMPONENT TOXICITY DATA:

Note: The component toxicity data is populated by the LOLI database and may differ from the product toxicity data given.

POTENTIAL HEALTH EFFECTS:

Eye contact: Eye contact may cause severe irritation and possibly burns to the eye lids,

conjunctivitis, corneal edema, and corneal burn.

Skin contact: Exposure to skin may cause mild irritation and skin rash. May cause allergic skin

reaction.

Inhalation: Inhalation of this material may cause irritation of upper and lower airways.

Ingestion: Ingestion of this material may cause gastrointestinal irritation. May cause local

tissue irritation to esophagus and stomach.

Chronic Effects: None known.

SIGNS AND SYMPTOMS OF EXPOSURE:

Inhalation (Breathing): Respiratory System Effects: Inhalation of this material may cause irritation, coughing. **Skin:** Skin Irritation. Exposure to skin may cause redness, mild irritation. Free resorcinol may penetrate the skin and cause systemic toxicity. This material contains less than 12% free resorcinol. May cause an allergic skin reaction.

Eye: Eye Irritation. Eye exposure may cause irritation and burns to the eyelids, conjunctivitis, corneal edema, and irritis

Ingestion (Swallowing): Gastrointestinal System Effects: Exposure by ingestion may cause irritation, nausea, and vomiting. May cause local tissue damage to esophagus and stomach such as burning, inflammation. Free resorcinol is well absorbed by the gastrointestinal (GI) tract, and this route of exposure can lead to systemic effects such as unconsciousness, respiratory failure, seizures, leukocytosis and severe metabolic acidosis, and methemoglobinemia. Alterations in liver and kidney functions have been reported in severe poisonings. This material contains less than 12% free resorcinol.

TOXICITY:

The resorcinol-formaldehyde resin is irritating in contact with skin and mucus membranes. Resorcinol, in low

SDS No.: M49021 **SDS Revision Date**: 14-Apr-2016

concentrations, is commonly used in the pharmaceutical and cosmetic industries. Resorcinol has been reported to be

less toxic than phenol or catechol by the ingestion or skin routes of exposure. Chemical analysis indicates that there is less than 50 ppm free formaldehyde present in this material.

CHRONIC TOXICITY:

Animal and human data have indicated that resorcinol may cause damage to the respiratory system. Animal and human data have indicated that resorcinol causes damage to the blood and central nervous system. This material contains less than 12% resorcinol.

Interaction with Other Chemicals Which Enhance Toxicity: None known.

GHS HEALTH HAZARDS:

GHS: ACUTE TOXICITY - ORAL: Category 5 - May be harmful if swallowed.

GHS: ACUTE TOXICITY - Category 5 - May be harmful in contact with skin.

DERMAL:

GHS: CONTACT HAZARD - EYE: Category 1 - Causes serious eye damage

GHS: CONTACT HAZARD - Category 3 - Causes mild skin irritation.

SKIN:

Skin Absorbent / Dermal Route? Yes.

GHS: SENSITIZATION HAZARD: Skin Sensitizer Category 1 - May cause an allergic skin reaction.

Carcinogenicity comment: Chemical analysis indicates that <50ppm free formaldehyde is present in product. No known ingredients which occur at greater than 0.1% are listed as a carcinogen in the IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, the NTP Annual Report on Carcinogens, or OSHA 29 CFR 1910 Subpart Z Toxic and Hazardous Substances (specifically regulated substances).

SECTION 12. ECOLOGICAL INFORMATION

Product Information:

No data is available on the mixture itself.

ECOTOXICITY DATA:

Ecotoxicity - Available LOLI Data for Components: As noted in table below:

Component	Freshwater Fish	<u>Invertebrate</u>	Algae Toxicity:	Other Toxicity:
		Toxicity:		
Resorcinol	96 hr. LC50	- 48 hr. LC50	- Algae-Scenede	Bacteria-E Coli:
	Oncorthynchus	Daphnia magna: 78	smus: LD0 60 mg/L	LD0 <1000 mg/L
	mykiss: >100 mg/L	mg/L		-
	(flow-through)			Arthropoda-Daphnia:
	- 96 hr. LC50			LD0 0.8 mg/L
	Pimephales			
	promeias: 53.4 mg/L			

SDS No.: M49021 **SDS Revision Date**: 14-Apr-2016

FATE AND TRANSPORT:

BIODEGRADATION: No data available.

PERSISTENCE: No data available.

BIOACCUMULATIVE POTENTIAL: No data available.

MOBILITY IN SOIL: No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste from material:

The US EPA has issued a Significant New Use Rule (SNUR) for a component of this product [CAS# 1067881-45-1 Formaldehyde, polymer with 1,3 benzenediol and 1,1 methylenebis[isocyanatobenzene]] under 40 CFR Part 721.10205 with regard to no release to water. Restrictions as identified in 40 CFR Part 721.90(a)(1), (b)(1), (c)(1) apply to this substance. No release into the waters of the US from any predictable or purposeful release of a manufacturing stream associated with any use of the substance, from any site; any predictable or purposeful release of a process stream containing the substance associated with any use of the substance from any site; or any predictable or purposeful release of a use stream containing the substance associated with any use of the substance from any site. In addition, recordkeeping requirements as specified in 40 CFR 721.125(a), (b), (c) and (k) are applicable to manufacturers, importers, and processors of this substance.

Container Management:

Dispose of container in accordance with applicable local, regional, national, and/or international regulations. Container rinsate must be disposed of in compliance with applicable regulations.

SECTION 14. TRANSPORT INFORMATION

IMPORTANT: The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

LAND TRANSPORT

U.S. DOT 49 CFR 172.101:

Status: Non-Bulk Packaging: Not Regulated under DOT unless transported by Vessel

Bulk Packaging or Shipment by Vessel: Regulated.

UN NUMBER: UN3082

PROPER SHIPPING NAME: Environmentally Hazardous Substance, Liquid, n.o.s, Resorcinol

HAZARD CLASS/ DIVISION: 9
PACKING GROUP: ||||
LABELING REQUIREMENTS: 9

SDS No.: M49021 **SDS Revision Date**: 14-Apr-2016

Status: Non-Bulk packaging: Not Regulated unless transported by vessel. Bulk

Packaging or Shipment by vessel: Regulated.

UN NUMBER: UN3082

SHIPPING NAME: Environmentally Hazardous Substance, Liquid, n.o.s, Resorcinol

CLASS OR DIVISION: 9
PACKING/RISK GROUP: |||
LABELING REQUIREMENTS: 9

MARITIME TRANSPORT (IMO / IMDG) :

Status - IMO / IMDG: Regulated

UN NUMBER: UN3082

PROPER SHIPPING NAME: Environmentally Hazardous Substance, Liquid, n.o.s, Resorcinol

HAZARD CLASS / DIVISION: 9
Packing Group: |||
LABELING REQUIREMENTS: 9

SECTION 15. REGULATORY INFORMATION

U.S. REGULATIONS

OSHA REGULATORY STATUS:

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4):

If a release is reportable under CERCLA section 103, notify the state emergency response commission and local emergency planning committee. In addition, notify the National Response Center at (800) 424-8802 or (202) 426-2675.

Component	CERCLA Reportable Quantities:
Resorcinol	5000 lb (final RQ)
Methanol	5000 lb (final RQ)

SARA EHS Chemical (40 CFR 355.30)

Not regulated

EPCRA SECTIONS 311/312 HAZARD CATEGORIES (40 CFR 370.10):

Acute Health Hazard

EPCRA SECTION 313 (40 CFR 372.65):

Not regulated

Component	Status:
Methanol	1.0 %

OSHA PROCESS SAFETY (PSM) (29 CFR 1910.119):

Not regulated

SDS No.: M49021 **SDS Revision Date**: 14-Apr-2016

NATIONAL INVENTORY STATUS

U.S. INVENTORY STATUS: Toxic Substance Control Act (TSCA): All components are listed or exempt.

TSCA 12(b): OxyChem and others are required to report as required under Section 12(b) Export Notification for CAS# 1067881-45-1.

Canadian Chemical Inventory: All components of this product are listed on either the DSL or the NDSL.

Component	DSL	NDSL
Resorcinol Formaldehyde Polymer 24969-11-7	Listed	Not Listed
Formaldehyde, polymer with 1,3-benzenediol and 1,1'-methylenebis [isocyanatobenzene*] 1067881-45-1		Listed
Resorcinol 108-46-3	Listed	Not Listed
Methanol 67-56-1	Listed	Not Listed

STATE REGULATIONS

California Proposition 65:

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

Component	California Proposition 65 Cancer WARNING:	California Proposition 65 CRT List - Male reproductive toxin:	California Proposition 65 CRT List - Female reproductive toxin:	Massachusetts Right to Know Hazardous Substance List	Hazardous	New Jersey Special Health Hazards Substance List
Resorcinol Formaldehyde Polymer 24969-11-7	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Resorcinol 108-46-3	Not Listed	Not Listed	Not Listed	Listed	1634	Not Listed
Formaldehyde, polymer with 1,3- benzenediol and 1,1'-methylenebis [isocyanatobenzene*] 1067881-45-1	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Methanol 67-56-1	Developmental Toxicity	Not Listed	Not Listed	Listed	1222	flammable - third degree

Component	Environmental		to Know Special Hazardous	to Know	Rhode Island Right to Know Hazardous Substance List
Resorcinol Formaldehyde Polymer 24969-11-7	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed

SDS No.: M49021 **SDS Revision Date**: 14-Apr-2016

Resorcinol 108-46-3	Not Listed	Listed	Not Listed	Present	Listed
Formaldehyde, polymer with 1,3- benzenediol and 1,1'-methylenebis [isocyanatobenzene*] 1067881-45-1	Not Listed				
Methanol 67-56-1	Listed	Listed	Not Listed	Present	Listed

CANADIAN REGULATIONS

• This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations

Component	Canadian Chemical Inventory:	NDSL:	WHMIS - Classifications of Substances:
Resorcinol Formaldehyde Polymer	Listed		
Formaldehyde, polymer with 1,3-benzenediol and 1,1'-methylenebis [isocyanatobenzene*]		Present	
Resorcinol	Listed Present (that participate in atmospheric photochemical reactions except those under item number 65 on the Toxic Substances List source)		D1B,D2B
Methanol	Listed Present (that participate in atmospheric photochemical reactions except those under item number 65 on the Toxic Substances List source)		B2,D1B,D2A,D2B

SECTION 16. OTHER INFORMATION

Prepared by: OxyChem Corporate HESS - Product Stewardship

Rev. Date: 14-Apr-2016

Reason for Revision:

- Changed the GHS classification: SEE SECTION 2
- Updated First Aid Measures: SEE SECTION 4
- EPA issued final SNUR rule: SEE SECTION 6 & 13
- ECOLOGICAL INFORMATION (SECTION 12)
- · Added substance name to "proper shipping name" in SECTION 14
- TSCA 12(b) statement changed: SEE SECTION 15
- Canadian Inventory change: SEE SECTION 15

SDS No.: M49021 **SDS Revision Date**: 14-Apr-2016

Removed NFPA/HMIS ratings from format: SEE SECTION 16

IMPORTANT:

The information presented herein, while not guaranteed, was prepared by technical personnel and is true and accurate to the best of our knowledge. NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, OR WARRANTY OR GUARANTY OF ANY OTHER KIND, EXPRESS OR IMPLIED, IS MADE REGARDING PERFORMANCE, SAFETY, SUITABILITY, STABILITY OR OTHERWISE. This information is not intended to be all-inclusive as to the manner and conditions of use, handling, storage, disposal and other factors that may involve other or additional legal, environmental, safety or performance considerations, and INDSPEC Chemical Corporation assumes no liability whatsoever for the use of or reliance upon this information. While our technical personnel will be happy to respond to questions, safe handling and use of the product remains the responsibility of the customer. No suggestions for use are intended as, and nothing herein shall be construed as, a recommendation to infringe any existing patents or to violate any Federal, State, local or foreign laws.

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

End of Safety Data Sheet