

## SAFETY DATA SHEET

Revision: 5.0  
Issue Date: 9-26-2013  
Revision Date: 06-29-2020

---

### SECTION 1: Product and Company Identification

PRODUCT NAME: Thermalbright® N Resin in Diglyme®

MANUFACTURER/SUPPLIER:  
NeXolve Holding Company, LLC  
290 Dunlop Blvd, Suite 200  
Huntsville, AL 35824  
256-836-7780

EMERGENCY HEALTH/EMERGENCY SPILL INFORMATION:

**For Hazardous Materials [or Dangerous Goods] Incident  
Spill, Leak, Fire, Exposure, or Accident  
Call CHEMTREC Day or Night**

**Within USA and Canada: 1-800-424-9300 CCN702632 or  
+1 703-527-3887 (collect calls accepted)**

For R&D use only. Not for drug, household or other uses.

---

### SECTION 2: Hazards Identification

#### GHS Classification

Flammable liquids (Category 3), H226  
Reproductive toxicity (Category 1B), H360

**GHS Label elements, including precautionary statements**

**Pictograms:**



**Signal word:** Danger

**Hazard statement(s):**

H226 Flammable liquid and vapor.

H360 May damage fertility or the unborn child.

**Precautionary statement(s):**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been understood.

P210 Keep away from heat/ sparks/ open flames/ hot surfaces. – No Smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion – proof electrical/ ventilating/ lighting/ equipment.

P242 Use only non – sparking tools.

P243 Take precautionary measures against static discharge.

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

P303 + P361 + P353 IF On Skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol – resistant foam for extinction.

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

May form explosive peroxides.

**HMIS Classification**

**Health hazard:** 0

**Chronic Health Hazard:** \*

**Flammability:** 2

**Physical hazards:** 0

**NFPA Rating**

**Health hazard:** 0

**Fire:** 2

**Reactivity Hazard:** 0

---

**SECTION 3: Composition/information on ingredients**

COMPONENT	CAS#	Range % by WT
Bis (2-methoxyethyl) ether	111-96-6	70-90%
CP1™ Polyimide	87182-96-5	10-30%
Proprietary Pigment	NA	10-30%

COMPONENT	Classification
Bis (2-methoxyethyl) ether	Flam. Liq. 3 (H226); Repr. 1B (H360)

---

**SECTION 4: First Aid Measures**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

Flush eyes with water as a precaution.

**If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

---

**SECTION 5: Firefighting Measures**

**Conditions of flammability**

Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.

**Suitable extinguishing media**

Alcohol-resistant foam, dry chemical, sand, or carbon dioxide.

**Unsuitable extinguishing media**

Do NOT use water jet.

**Special protective equipment for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides

**Further information**

Use water spray to cool unopened containers.

**SECTION 6: Accidental release measures**

**Personal precautions**

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Methods and materials for containment and cleaning up**

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations.

**SECTION 7: Handling and Storage**

**Precautions for safe handling**

Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge.

**Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

**SECTION 8: Exposure controls/personal protection**

**Components with workplace control parameters**

Component	CAS-No.	Value	Control parameters	Basis
Bis(2-methoxyethyl)ether	111-96-6	PEL	1 ppm 5.5 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
	Remarks	Skin		

		STEL	5 ppm 27 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		Skin		

**Predicted No Effect Concentration (PNEC) – Diglyme**

Compartment	Value
Water	9.43 mg/L
Soil	1.72 mg/Kg
Marine Water	0.64 mg/L
Fresh Water	6.4 mg/L
Marine Sediment	2.74 mg/Kg
Fresh Water Sediment	27.4 mg/Kg
Onsite Sewage Treatment Plant	50 mg/L

**Personal protective equipment:**

**Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Eye protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin and body protection**

Impervious clothing, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

---

**SECTION 9: Physical and chemical properties****Appearance**

Form    Viscous liquid

Color    white to light grey

**Safety data**

pH    no data available

Melting point/freezing  
Point    no data available  
-64 °C (-83 °F) - lit (for Bis(2-methoxyethyl)ether only)Boiling point                                no data available  
162°C (324°F) - lit. (for Bis(2-methoxyethyl)ether only)Flash point                                  no data available  
51°C (124°F) - closed cup - (for Bis(2-methoxyethyl)ether only)

Ignition temperature                      no data available

Auto-ignition temp                        no data available

Lower explosion limit                      no data available  
1.4 %(V) (for Bis(2-methoxyethyl)ether only)Upper explosion limit                      no data available  
17.4 %(V) (for Bis(2-methoxyethyl)ether only)

Vapour pressure                            no data available)

Density                                        1 g/cm<sup>3</sup> at 25 °C (77 °F)

Water solubility                            no data available

Partition coefficient:  
n-octanol/water                            no data availableRelative vapor  
density                                        no data available

Odor    no data available

Odor Threshold                              no data available

Evaporation rate                            no data available

---

## SECTION 10: Stability and Reactivity

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

no data available

### Conditions to avoid

Heat, flames and sparks.

### Materials to avoid

Strong oxidizing agents

### Hazardous decomposition product

Hazardous decomposition products formed under fire conditions. - Carbon oxides  
Other decomposition products - no data available

---

## SECTION 11: Toxicological Information

### Acute toxicity

#### Oral LD50

No data available

For Bis(2-methoxyethyl) ether only  
LD50 – (Rat, female) - 4,760 mg/kg  
(OCED Test Guideline 401)

#### Inhalation LC50

no data available

For Bis(2-methoxyethyl) ether only  
LC50 – (Rat, male and female) - 7 h - > 11 mg/l  
(OCED Test Guideline 403)

#### Dermal LD50

no data available

### Other information on acute toxicity

no data available

### Skin corrosion/irritation

no data available

For Bis(2-methoxyethyl) ether only  
Skin - Rabbit  
Result: No skin irritation - 24 h  
(OECD Test Guideline 404)

**Serious eye damage/eye irritation**  
no data available

For Bis(2-methoxyethyl) ether only  
Eyes - Rabbit  
Result: No eye irritation  
(OECD Test Guideline 405)

**Respiratory or skin sensitization**  
no data available

**Germ cell mutagenicity**  
no data available

(for Bis(2-methoxyethyl)ether only)  
Ames test - *Salmonella typhimurium*: negative  
unscheduled DNA synthesis assay - negative (OECD Test Guideline 475)  
Rat - male and female - Bone marrow: negative

**Carcinogenicity**

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**

May damage the unborn child For Bis(2- methoxyethyl)ether only  
May damage fertility For Bis(2- methoxyethyl)ether only

**Teratogenicity**

Laboratory experiments have shown teratogenic effects. For Bis(2- methoxyethyl)ether only  
Presumed human reproductive toxicant For Bis(2- methoxyethyl)ether only

**Specific target organ toxicity - single exposure (Globally Harmonized System)**  
no data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**  
no data available



**Aspiration hazard**

no data available

**Synergistic effects**

no data available

**Additional Information**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence

---

**SECTION 12: Ecological Information**

**Toxicity**

no data available

(for Bis(2-methoxyethyl)ether only)

Toxicity to fish	LC50 - <i>Pimephales promelas</i> (fathead minnow) - 8,569 mg/l - 96 h Remarks: (IUCLID)
Toxicity to daphnia and other aquatic invertebrates	semi-static test - EC50 - <i>Daphnia magna</i> (Water flea) - 943 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	semi-static test - ErC50 - <i>Pseudokirchneriella subcapitata</i> (green algae) - > 10,000 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to bacteria	static test EC20 - activated sludge - 1,067 mg/l - 3 h (OECD Test Guideline 209)

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

no data available

---

**SECTION 13: Disposal considerations**

**Product**

Contact a licensed professional waste disposal service to dispose of this material. Offer surplus and non-recyclable solutions to a licensed disposal company. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable.

**Contaminated packaging**

Dispose of as unused product.

---

**SECTION 14: Transportation information**

**DOT (US)**

UN number: 1866 Class: 3 Packing group: III  
Proper shipping name: Resin Solution

**IMDG**

UN number: 1866 Class: 3 Packing group: III  
Proper shipping name: Resin Solution

**IATA**

UN number: 1866 Class: 3 Packing group: III  
Proper shipping name: Resin Solution

---

**SECTION 15: Regulatory information**

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

Component	CAS-No.	Revision Date
Bis(2-methoxyethyl)ether	111-96-6	1989-08-11

**SARA 311/312 Hazards**

Fire Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

Component	CAS-No.	Revision Date
Bis(2-methoxyethyl)ether	111-96-6	1989-08-11

**New Jersey Right To Know Components**

Component	CAS-No.	Revision Date
Bis(2-methoxyethyl)ether	111-96-6	1989-08-11

### **California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

---

### **SECTION 16: Other information**

The information contained herein is believed to be correct, but there is no guarantee such information is accurate or complete, and this Safety Data Sheet does not make any warranty, express or implied, regarding the product. NeXolve does not assume liability for any loss or damage, direct or indirect, arising out of the use of this information. The user is solely responsible for (1) the safe handling and use of this product, (2) legal compliance, and (3) all losses, damages, or liability from use of this product.