

# MATERIAL SAFETY DATA SHEET — 16 Sections

# SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier WetLink Thixotropic 80A Potting Compound (Epoxy) – Part B (Smaller diameter cylinder on combined cartridge)		SKU POTTING-THX-80A-R1	
Product Use Epoxy adhesive, se	alant & coating		
Manufacturer's Name RELTEK LLC		Supplier's Name Blue Robotics Inc.	
Street Address 2345 Circadian Way	Street Address 2345 Circadian Way		St., Suite 102
City Santa Rosa			State CA
Postal Code 95407	Emergency Telephone (800) 535-5053 (USA) (352) 323-3500 (Int)	Postal Code 90503	Emergency Telephone (800) 255-3924 (USA) (813) 248-0585 (Int)
Date MSDS MSDS Prepared By Prepared Blue Robotics, Inc.  18 SEP 2018			

## SECTION 2 — HAZARDS IDENTIFICATION

#### GHS Classification of the substance or mixture:

Acute toxicity - Oral Category 4
Skin corrosion - Category 1B
Serious Eye Damage - Category 1
Skin sensitization - Category 1

Reproductive toxicity - Category 2

Specific target organ toxicity - repeated exposure - Oral Category 2

### **Hazard Statements:**

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H361: Suspected of damaging fertility or the unborn child

H373a: May cause damage to organs through prolonged or repeated exposure if swallowed

#### Hazards not otherwise classified:

Harmful if swallowed.

May cause sensitization by skin contact.

Corrosive

Severe skin irritant.

Severe eye irritant.

Severe respiratory irritant.

### **Physical Hazards:**

Not classified - No dangerous reaction known under conditions of normal use.



### **Signal Word:**

DANGER







#### **Precautionary Statements (Phrases):**

Prevention: P201:Obtain special instructions before use.

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

P260:Do not breathe dust/fume/gas/mist/vapours/spray.

P264:Wash hands thoroughly after handling.

P270:Do not eat, drink or smoke when using this product.

P272:Contaminated work clothing should not be allowed out of the workplace.

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

P281:Use personal protective equipment as required.

Response: P301+P312:IF SWALLOWED: Call a POISON CENTER or doctor/physician if

you feel unwell.

P301+P330+P331 :IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

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

P304+P340 :IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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

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

P310 :Immediately call a POISON CENTRE or doctor/physician.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P363: Wash contaminated clothing before reuse.

Storage: P405:Store locked up.

Disposal: P501:Disposal of contents/container to be specified in accordance with regulations.

### Other Hazards:

No data available

# **SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS**

Components	EINCES	CAS	Concentration	Classification
Benzyl alcohol	202-859-9	100-51-6	15% - 30%	Acute toxicity,4
m-Phenylenebis(methylamine)	216-032-5	1477-55-0	3% - 5%	Acute toxicity,4
4-tert-Butylphenol:	202-679-0	98-54-4	4% - 6%	Acute toxicity,2
Polyamide:	Polymer	Confidential	20% - 40%	Unclassified
Mixed Cycloaliphatic amines:	Polymer	Confidential	20% - 40%	Unclassified
Cycloaliphatic amine:	Polymer	Confidential	3% - 7%	Unclassified
Cycloaliphatic Aromatic Amine:	Polymer	Confidential	3% - 7%	Unclassified

# SECTION 4 — FIRST AID MEASURES

**General advice:** Seek medical advice.

If breathing has stopped or is labored, give assisted respirations.

Supplemental oxygen may be indicated.

If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation

immediately.

**Skin contact:** Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so

without delay. Wash off immediately with plenty of water for at least 20 minutes. Cover wound

with sterile dressing.

NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation. Initiate and maintain continuous irrigation until the patient receives medical care. If



medical care is not promptly available, continue to irrigate for one hour.

**Inhalation:** Move to fresh air. If breathing has stopped or is labored, give assisted respirations.

Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should

begin cardiopulmonary resuscitation immediately.

**Eye contact:** Remove contact lenses. Hold eyelids apart, initiate and maintain gentle and continuous irrigation

until the patient receives medical care. If medical care is not promptly available, continue to

irrigate for one hour.

**Ingestion:** Never give anything by mouth to an unconscious person. Do not induce vomiting without

medical advice. Prevent aspiration of vomit. Turn victim's head to the side.

Most important symptoms/effects, acute and delayed.

Dermal: A component in this mixture has caused allergic skin reactions in humans.

Indication of immediate medical and special

Eye disease. Skin disorders and Allergies.

Repeated and/or prolonged exposure to low concentrations of vapors and/or aerosols may

cause

**treatment needed:** Sore throat; Asthma; Adverse respiratory effects (such as cough, tightness of chest or shortness

of breath); Adverse skin effects (such as rash, irritation or corrosion); Adverse eye effects (such

as conjunctivitis or corneal damage).

# **SECTION 5 — FIRE FIGHTING MEASURES**

**Suitable extinguishing** Carbon dioxide (CO2); Dry chemical; Dry sand; Limestone powder.

media: Extingu Avoid:

**Extinguishing Media to** Violent steam generation or eruption may occur upon application of direct water stream to

hot liquids. Do not use direct water stream; may spread fire.

Special hazards arising from the substance or mixture—Hazardous Combustion Products:

Downwind personnel must be evacuated.

Burning produces noxious and toxic fumes.

Ammonia gas may be liberated at high temperatures.

**Products:** In case of incomplete combustion an increased formation of oxides of nitrogen (NOx) is to

be expected. Incomplete combustion may form carbon monoxide.

May generate ammonia gas.

May generate toxic nitrogen oxide gases.

Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from firefighting to enter drains or water courses.

**Further information:** Burning liquids may be moved by carefully flushing with water to protect personnel and

minimize property damage. Water fog, applied gently may be used an extinguishing blanket.

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during firefighting operations. If contact is likely, change to full

chemical resistant firefighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. Do not allow run-off from firefighting to enter drains or water

courses.

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

**Personal** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls

and Personal Protection. Refer to Section 7, Handling, for additional precautionary measures

**Environmental** Construct a dike to prevent spreading. Prevent from entering into soil, ditches, sewers,

precautions: waterways and/or groundwater. See Section 12, Ecological Information.

**Methods for**Contain spilled material if possible. Absorb with materials such as: Sand. Polypropylene fiber products. Polyethylene fiber products. Remove residual with soap and hot water. Collect in

products. Polyethylene fiber products. Remove residual with soap and hot water. Collect in suitable and properly labeled containers. Residual can be removed with solvent. Consult appropriate solvent Safety Data Sheet for handling information and exposure guidelines. See

Section 13, Disposal Considerations, for additional information.

**Additional advice:** Open enclosed spaces to outside atmosphere.

If possible, stop flow of product.



# **SECTION 7 — HANDLING AND STORAGE**

Handling: Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. See Section 8,

Exposure Controls and Personal Protection.

**Storage:** Keep containers tightly closed in a dry, cool and well-ventilated place. Avoid prolonged high heat

and freezing conditions; 5°C ><25°C preferred temperature. Shelf life: 24 months from date of

shipment. Do not store near acids. Keep away from alkalis.

### SECTION 8 — EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure limits: not determined.
Derived from product primary content - no effects

level:

Respiratory protection:

Systemic Effects Acute Local Effects 10 ppm Not Determined Dermal Inhalation 10 ppm Not Determined Long-Term Dermal 10 ppm Not Determined Inhalation 10 ppm Not Determined

Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions, no respiratory protection should be needed; however, if material is heated or sprayed, use an approved air-purifying respirator. Use the following CE approved air-purifying respirator: Organic vapor cartridge with a particulate pre-filter, type AP2.

Hand protection:

Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Ethyl vinyl alcohol laminate ("EVAL"). Nitrile/butadiene rubber ("nitrile" or "NBR"). Neoprene. Polyvinyl chloride ("PVC" or "vinyl"). The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Use safety glasses (with side shields). Safety glasses (with side shields) should be consistent

Eye protection:

with EN 166 or equivalent.

Skin and body protection:

**Engineering** 

hygiene:

fac im pro

measures:

Special instructions for protection and

Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse or dispose of properly. Items which cannot be decontaminated, should be removed and disposed of properly. Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust

ventilation may be necessary for some operations. Wash at the end of each work shift and before eating, smoking or using the toilet. Use good

personal hygiene. Do not consume or store food in the work area.

# **SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

Form: Liquid
Color: Amber
Odor: Ammoniacal
Relative density: 1.017 (water = 1)

**Vapor pressure:** 1.60 mmHg at 70 °F (21 °C)

Freezing Point: -15 to -5 °C Auto ignition: > 300°C

**Boiling point/range:** 195°C (383°F) estimated **Flash point:** >160°C (320°F) estimated

Viscosity: 2190 mPa.s @ 25 °C, @ 132 sec-1 (cone & plate)

**pH:** >10



# **SECTION 10 — STABILITY AND REACTIVITY**

**Reactivity:** No dangerous reaction known under conditions of normal use.

**Chemical stability:** Stable under recommended storage conditions. See Storage, Section 7.

Possibility of Hazardous reactions: N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations. Reaction with peroxides may result in violent decomposition of peroxide

possibly creating an explosion.

**Conditions to avoid:** Acetamide and formamide derivatives of a component of this product are extremely irritating to

humans and animals. To prevent the formation of these amides do not mix this product with any of the following reagents: acetic anhydride, acetyl chloride, methyl acetate, ethyl acetate, methyl formate, ethyl formate, or other alkyl acetate or formate esters. It is not expected that acetic acid or formic acid themselves would react with this component at room temperature, but given the extremely low doses required to cause irritation, these reagents should also be avoided.

Incompatible materials:

Oxidizing agents, Amines, Sodium hypochlorite, Oxidizing agents, Incompatible with bases, Reducing agents, Reactive metals (e.g. sodium, calcium, zinc etc.), Materials reactive with hydroxyl compounds, Nitrous acid and other nitrosating agents, Organic acids (i.e. acetic acid, citric acid etc.), Mineral acids, Sodium hypochlorite. Product slowly corrodes copper, aluminum,

zinc and galvanized surfaces

Hazardous decomposition products:

Nitric acid, Ammonia, Nitrogen oxides (NOx), Nitrogen oxide can react with water vapors to form

corrosive nitric acid, Carbon monoxide, Carbon dioxide (CO2), Aldehydes, Flammable

hydrocarbon fragments, Nitrosamine.

## SECTION 11 — TOXICOLOGICAL INFORMATION

Ingestion: Harmful if swallowed. If ingested, severe burns of the mouth and throat, as well as a danger of

perforation of the esophagus and the stomach.

**Inhalation:** Inhalation of aerosol may cause irritation to the upper respiratory tract. Can cause severe eye,

skin and respiratory tract burns. Harmful if inhaled and may cause delayed lung injury. Risk of serious damage to the lungs (by inhalation). May cause nose, throat, and lung irritation. Can cause severe eye, skin and respiratory tract burns. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system

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**Skin:** Contact: Causes skin burns.

**Absorption:** Prolonged skin contact is unlikely to result in absorption of harmful amounts, but may cause

skin irritation with local redness. Repeated contact may cause skin irritation with local

redness The dermal LD50 has not been determined.

**Sensitization:** A component in this mixture has caused allergic skin reactions in humans.

Eye irritation:

Causes eye burns. Severe eye irritation. May cause blindness.

**Symptoms:** Repeated and/or prolonged exposure to low concentrations of vapors and/or aerosols may cause: Sore throat, Asthma. Adverse respiratory effects (such as cough, tightness of chest or

shortness of breath). Eye disease. Skin disorders and Allergies. Adverse skin effects (such as rash, irritation or corrosion). Adverse eye effects (such as conjunctivitis or corneal damage).

Chronic Health Hazard: Carcine

Carcinogenicity: No data available.

Reproductive toxicity: No data is available on the product itself. Germ cell mutagenicity: No data is available on the product itself.

Specific target organ systemic toxicity (single exposure): No data available. Specific target organ systemic toxicity (repeated exposure): No data available.

Aspiration hazard: No data available.

**Acute Toxicity:** Acute Oral Toxicity: No data is available on the product itself.

Acute Oral Toxicity - Components: Cycloaliphatic amine / LD50: 625 mg/kg / Species: Rat.

Acute Oral Toxicity: LD50: > 500 mg/kg / Species : Rat. / Method: Estimated.

Inhalation: No data is available on the product itself. Inhalation: No data is available on the product itself.

Inhalation – Components / Benzyl alcohol / LC50 (4 h): > 4.178 mg/l OECD Test Guideline

403 / Species: Rat.

Acute Dermal Toxicity: No data is available on the product itself.

Acute Dermal Toxicity - Components: Cycloaliphatic amine / LD50 : 2,110 mg/kg / Species :

Rabbit.

Acute Dermal Toxicity: LD50 : > 2,800 mg/kg / Species : Rabbit / Method : Estimated.



Skin corrosion/irritation: Corrosive in an in vitro test. Corrosive to the skin of a rabbit.

Serious eye damage/eye irritation: Severe eye irritation.

Sensitization : No data available. May cause sensitization of susceptible persons by skin

contact.

Delayed and Immediate Effects and Chronic Effects from Short and Long Term Exposure Prolonged contact may result in chemical burns and permanent damage.

Repeated or prolonged contact causes sensitization, asthma and eczemas. Asthma. Adverse respiratory effects (such as cough, tightness of chest or shortness of breath).

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Eye disease.

Skin disorders and Allergies.

May cause allergic skin reaction.

Adverse skin effects (such as rash, irritation or corrosion).

Adverse eye effects (such as conjunctivitis or corneal damage).

This product may cause adverse reproductive effects.

Mixed polycycloaliphatic amines was tested in rats for systemic effects in a subchronic (28-day) oral study at doses ranging from 15 to 300 mg/kg/day. Effects seen at 300 mg/kg/day included decreased survival, decreased body weight gain, increased liver, kidney and adrenal weights and histological changes in the liver, kidney, adrenals and spleen. The No-Observed-

Adverse-Effect-Level (NOAEL) was 15 mg/kg/day.

Rats were orally administered Tetramethyl-5-Decyne-4,7-Diol, 2,4,7,9- (S-104) in the diet for 28 days at concentrations of 0, 625, 1250, 2500, and 5000 ppm. No adverse effects were seen at any of the dose levels. The oral No-Observed-Effect-Level (NOEL) was 5000 ppm.

Benzyl alcohol exhibits a strong anesthetic effect when applied directly to the skin.

**Carcinogenic Toxicity:** 

This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in

concentrations of 0.1 percent or greater.

### **SECTION 12 — ECOLOGICAL INFORMATION**

**Toxicity** 

Benzene-1,3- dimethaneamine (MXDA)	Aquatic Plant Toxicity	EC50 (72 h): 12 mg/l	Species: Scenedesmus subspicatus
Benzyl alcohol	Fish Toxicity	LC50 96h, 10 mg/l	Specie:Bluegill sunfish (Lepomis macrochirus)
		LC50 96h, 460 mg/l	Specie: Fathead minnow (Pimephales promelas)
	Aquatic Plant Toxicity	IC50 (72 h): 700 mg/l	Species : Algae
	Other organisms Toxicity	No data available	
Mixed Cycloaliphatic amine	Fish Toxicity	LC0 (96 h): 46 mg/l	Specie: Golden orfe (Leuciscus idus)
		LC50 (96 h) : > 100 mg/l	Specie: Golden orfe (Leuciscus idus)
		LC0 (96 h): 46 mg/l	Specie: Golden orfe (Leuciscus idus)
	Daphnia Toxicity	EC50 (48 h): 6.84 mg/l	Species: Daphnia magna
	Aquatic Plant Toxicity	EC50 (72 h): 140 - 200 mg/l	Species: Algae



**Persistence and Degradability** 

Benzene-1,3-dimethaneamine (MXDA)

Benzyl alcohol

Mixed Cycloaliphatic amine

No relevant data found.

No relevant data found.

No relevant data found.

Bioaccumulative potential

Benzene-1,3-dimethaneamine (MXDA)

No relevant data found.

Benzyl alcohol Low potential

Mixed Cycloaliphatic amine Nil

Mobility in soil

Benzene-1,3-dimethaneamine (MXDA)

Benzyl alcohol

Mixed Cycloaliphatic amine

No relevant data found.

No relevant data found.

No relevant data found.

# **SECTION 13 — DISPOSAL CONSIDERATIONS**

Waste from residues and This product, when being disposed of in its unused and uncontaminated state should

unused products: be treated as a hazardous waste according to EC Directive 91/689/EEC.

Do not dump into any sewers, on the ground, or into any body of water.

Parts A and B thoroughly mixed in a ratio range between 1:1 to 2.5:1 will cure to an

inert material in one to three days that may be disposed of appropriately.

**Contaminated packaging:** Dispose of container and unused contents in accordance with federal, state, and local

requirements.

Comply with all national and provincial laws and any municipal or local by-laws governing hazardous waste. For Unused & Uncontaminated Product, the preferred options include sending to a licensed, permitted incinerator or other thermal destruction device.

As your supplier, we have no control over the management practices or manufacturing processes of parties handling or using this material. The information presented here pertains only to the product as shipped in its intended condition as described in SDS Section 3 --Composition.

# **SECTION 14 — TRANSPORT INFORMATION**

**DOT: UN2735** 

Proper shipping name:				
Amines, liquid, corrosive, n.o.s. (Benzene-1,3-dimethaneamine)				
Class: 8 Packing Group: III Label(s): Corrosive Marine Pollutant: Yes				

#### **IATA: UN2735**

	Proper shipping name:			
	Amines, liquid, corrosive, n.o.s. (Benzene-1,3-dimethaneamine)			
Class: 8 Packing Group: III Label(s): Corrosive Marine Pollutant: Yes				

#### **IMDG: UN2735**

Proper shipping name: Amines, liquid, corrosive, n.o.s. (Benzene-1,3-dimethaneamine)				
	Class: 8	Packing Group: III	Label(s): Corrosive	Marine Pollutant: Yes

#### **TDG: UN2735**

100: 0142100				
Proper shipping name:				
Amines, liquid, corrosive, n.o.s. (Benzene-1,3-dimethaneamine)				
Class: 8 Packing Group: III Label(s): Corrosive Marine Pollutant: Yes				



# **SECTION 15 — REGULATORY INFORMATION**

Regulatory list

**USA:** TSCA All contents are included on Inventory

**EU:** EINECS All contents are included on EINECS inventory or polymer substance,

monomers included on EINECS inventory or no longer polymer.

DSL All contents are included on Inventory Canada: All contents are included on Inventory Australia: AICS All contents are included on Inventory Japan: **ENCS** South Korea: KECI All contents are included on Inventory **Philippines PICCS** All contents are included on Inventory China: **SEPA** All contents are included on Inventory

#### **OSHA Hazard Communication Standard**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### EPA SARA Title III Section 313 (40CFR 370) Hazard Classification

(Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Immediate (Acute) Health HazardYesDelayed (Chronic) Health HazardYesFire HazardNoReactive HazardNoSudden Release of Pressure HazardNo

### EPA SARA Title III Section 313 (40CFR 372) Component(s) above 'de minimus' level

(Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

**HMIS Rating** 

Health 3
Flammability 1
Physical hazard 0

### California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

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.

### **SECTION 16 — OTHER INFORMATION**

**Document information** 

Prepared by: Blue Robotics, Inc., Engineering Department

Document Issue: Sept 18, 2018 Rev A

For additional information, please visit our web site at www.bluerobotics.com for the product data sheet.

This Safety Data Sheet has been established in accordance with the applicable OSHA and European Directives and applies to all countries that have translated the Directives in their national laws.

RELTEK LLC and Blue Robotics Inc. urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.