

## RJLR8-2W and Curing Agent

SDS Number: 747

Revision Date: 10/26/2016

Page 1 of 9

### 1 PRODUCT AND COMPANY IDENTIFICATION

#### Manufacturer

RJR Technologies, Inc.  
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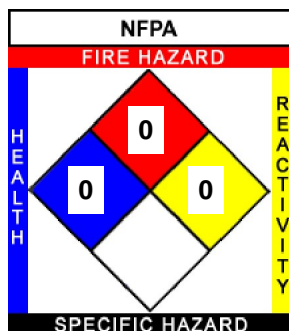
**Product Name:** RJLR8-2W and Curing Agent  
**Revision Date:** 10/26/2016  
**Version:** 1.00  
**SDS Number:** 747  
**Common Name:** Cured Epoxy  
**CAS Number:** MIXTURE  
**Chemical Family:** Polyepoxides  
**Chemical Formula:** \*\*\* PROPRIETARY \*\*\*  
**Product Use:** Adhesive  
**Emergency Phone:** + 510.638.5901

This Safety Data Sheet (SDS) is written in accordance with OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

### 2 HAZARDS IDENTIFICATION

NFPA:  
HMIS III:

Health = 0, Fire = 0, Reactivity = 0  
H\*0/F0/PH0



| HMIS III            |   |
|---------------------|---|
| HEALTH              | 0 |
| FLAMMABILITY        | 0 |
| PHYSICAL HAZARDS    | 0 |
| PERSONAL PROTECTION |   |

| PERSONAL PROTECTION INDEX |  |   |   |
|---------------------------|--|---|---|
| A                         |  | G |   |
| B                         |  | H |   |
| C                         |  | I |   |
| D                         |  | J |   |
| E                         |  | K |   |
| F                         |  | X | Consult your supervisor or S.O.P. for "SPECIAL" handling directions |
| A                         |  | n |   |
| t                         |  | o |   |
| u                         |  | p |   |
| w                         |  | q |   |
| y                         |  | r |   |
| z                         |  | s |   |

## RJLR8-2W and Curing Agent

SDS Number: 747

Revision Date: 10/26/2016

Page 2 of 9

GHS Signal Word:  
WARNING

GHS Hazard Pictograms:



GHS Classifications:

Health, Acute toxicity, 5 Oral  
Health, Skin sensitization, 1 A  
Health, Serious Eye Damage/Eye Irritation, 2 A

GHS Phrases:

H303 - May be harmful if swallowed  
H317 - May cause an allergic skin reaction  
H319 - Causes serious eye irritation

GHS Precautionary Statements:

P264 - Wash skin thoroughly after handling.  
P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P302+352 - IF ON SKIN: Wash with soap and water.  
P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.  
P333+313 - If skin irritation or a rash occurs: Get medical advice/attention.  
P337+313 - If eye irritation persists: Get medical advice/attention.  
P501 - Dispose of contents/container to an approved waste disposal plant.

The GHS Hazard Statements assigned to this product only apply to product that is present as nuisance dusts that may be created by crushing product into small enough pieces, creating dispersable dust. Under normal and proper handling circumstances, the cured epoxy adhesive presents no hazards associated with oral toxicity, skin allergic reactions, or eye irritation.

### 3

### COMPOSITION/INFORMATION ON INGREDIENTS

#### Ingredients:

| Cas # | Percentage | Chemical Name                              |
|-------|------------|--|
| N/A   | 20-50%     | Trade Secret 1**                           |
| N/A   | 14-49%     | Proprietary, non-hazardous, non-regulated* |
| N/A   | 10-40%     | Trade Secret 2**                           |
| N/A   | 5-20%      | Trade Secret 3**                           |

\*Balance of ingredients are non-hazardous, as defined by OSHA 29CFR1910.1200 or the Globally Harmonized System of Classification and Labeling of Chemicals (GHS), or hazardous in less than 1% concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory/skin sensitizers).

\*\*The specific chemical identities of the ingredients of this mixture labeled as "Trade Secret" are considered to be proprietary and are withheld in accordance with the provisions of 29CFR1910.1200 Sect. (i) Trade Secrets.

**RJLR8-2W and Curing Agent**

SDS Number: 747

Revision Date: 10/26/2016

Page 3 of 9

**4 FIRST AID MEASURES**

- Inhalation:** Generally this product does not present an inhalation hazard. If dust is inhaled, blow nose to remove substances from nasal passages. If symptoms develop, move victim to fresh air. Give oxygen or artificial respiration if needed. If symptoms persist, obtain medical attention.
- Skin Contact:** Generally this product does not irritate the skin. If skin is exposed to dust, irritation and/or a rash may occur. Flush skin with water for at least 15 minutes to ensure all chemical is removed. Consult a physician if irritation and/or a rash persists.
- Eye Contact:** Generally this product does not irritate the eyes. If eyes are exposed to dust, abrasive irritation may occur. Do NOT rub eyes! Flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Remove contact lenses if present and easy to do so. If irritation persists, obtain medical attention.
- Ingestion:** This product is not likely to be ingested. If accidentally ingested, rinse mouth with water. Give 3-4 glasses of water or milk to dilute stomach contents. Do NOT induce vomiting unless instructed to do so. Never give anything by mouth to an unconscious person. If significant amounts are swallowed or irritation or discomfort occurs, seek immediate medical attention.

**Most important symptoms and effects, both acute and delayed:**

The most important known symptoms and effects are described in the labelling (see Section 2) and/or Section 11.

**Indication of any immediate medical attention and special treatment needed:**

No data available.

**5 FIRE FIGHTING MEASURES**

- |                            |                   |
|----------------------------|-------------------|
| <b>Flammability:</b>       | Non-flammable     |
| <b>Flash Point:</b>        | DNA               |
| <b>Flash Point Method:</b> | DNA               |
| <b>Burning Rate:</b>       | No data available |
| <b>Autoignition Temp:</b>  | No data available |
| <b>LEL:</b>                | DNA               |
| <b>UEL:</b>                | DNA               |

**Extinguishing Media:**

Water Spray  
Carbon Dioxide  
Alcohol-Resistant Foam  
Dry Chemical

**Special Hazards Arising From the Substance or Mixture:**

Carbon Oxides  
Hydrogen Chloride gas  
Hydrogen Cyanide gas  
Magnesium Oxides  
Nitrogen Oxides (NOx)  
Silicon Oxides  
Sulfur Oxides

**Advice for Firefighters:**

Firefighters should wear full-face, positive-pressure respirators.

**RJLR8-2W and Curing Agent**

SDS Number: 747

Revision Date: 10/26/2016

Page 4 of 9

**Further Information:**

If incinerated, may release toxic fumes.  
Use water spray to cool unopened containers.  
See Section 7 for more information on safe handling.  
See Section 8 for more information on personal protection equipment.  
See Section 13 for disposal information.

**6 ACCIDENTAL RELEASE MEASURES****Personal Precautions, Protective Equipment and Emergency Procedures:**

Use personal protective equipment as required.  
Keep dust from contacting eyes and skin.

**Environmental Precautions:**

No special measures required.

**Methods and Materials for Containments and Cleaning Up:**

Pick up large pieces mechanically. Sweep up dust carefully without generating airborne nuisance dusts.  
Collected waste should then be placed in container for disposal.  
Dispose of contaminated material according to Section 13.

**Reference to Other Sections:**

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for information on proper disposal.

**7 HANDLING AND STORAGE****Handling Precautions:**

Avoid breathing dusts.  
Avoid contact with eyes and skin.  
Keep containers closed when not in use.  
Do not expose product to open flame, excessive heat, or direct sunlight.  
Keep material out of reach of children.  
Keep material away from incompatible materials.

**Storage Requirements:**

Keep container tightly closed.  
Do not store uncured material at temperatures greater than 50.00 °C (122.00 °F).  
Do not store in direct sunlight.  
Store away from strong acids, strong bases, strong oxidizing agents, strong reducing agents, Mercaptans, Amines, Hydrogen Fluoride and Acid Anhydrides.

**8 EXPOSURE CONTROLS/PERSONAL PROTECTION****Engineering Controls:**

All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use local exhaust at filling zones and where leakage and dust formation is probable. Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

**Personal Protective Equip:**

Eye/face protection:  
Eye protection is not required if proper chemical handling and hygiene practices are followed.  
If desired, when using material use safety glasses according to HMIS PP, A. All safety

## RJLR8-2W and Curing Agent

SDS Number: 747

Revision Date: 10/26/2016

Page 5 of 9

equipment should be tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

**Skin protection:**

Not required if proper chemical handling and hygiene practices are followed. If desired, use gloves made from Neoprene, Nitrile or Buna rubber. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact. Dispose of contaminated gloves according to applicable laws and laboratory practices.

**Body Protection:**

Not required. Chemically resistant safety glasses and gloves may be used, if desired. Type of protective equipment should be selected based on concentration amount and conditions of use of this material.

**Respiratory protection:**

Not required. Full-face vapor respirator may be required as backup to engineering controls when proper engineering controls are not in place to keep TLV and PEL limits below defined thresholds. Respiratory protection must comply with 29 CFR 1910.134.

**Control of environmental exposure:**

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

**Components with workplace control parameters:**

Component(s): Trade Secret 2

CAS No(s): N/A

USA OSHA Occupational Exposure Limits Table Z-3 Mineral Dusts (TWA): 20 mppcf\*

USA NIOSH Recommended Exposure Limits (TWA): 6 mg/m<sup>3</sup>

USA California Permissible Exposure Limits for Chemical Contaminants (Title 8, Article 107) (PEL): 6 mg/m<sup>3</sup>

\*mppcf = million particles per cubic foot

**Biological occupational exposure limits:**

Contains no reportable substances with biological occupational exposure limits values.

|          |   |
|----------|---|
| <b>9</b> | <b>PHYSICAL AND CHEMICAL PROPERTIES</b> |
|----------|---|

|                               |                                 |                              |                |
|-------------------------------|---------------------------------|------------------------------|----------------|
| <b>Appearance:</b>            | Amber Solid                     | <b>Odor:</b>                 | Odorless       |
| <b>Physical State:</b>        | Solid                           | <b>Molecular Formula:</b>    | MIXTURE        |
| <b>Odor Threshold:</b>        | Not determined                  | <b>Solubility:</b>           | Insoluble      |
| <b>Particle Size:</b>         | Not determined                  | <b>Softening Point:</b>      | Not determined |
| <b>Spec Grav./Density:</b>    | 1.174 g/ml (9.80 lbs/gal)       | <b>Percent Volatile:</b>     | < 1.0%         |
| <b>Viscosity:</b>             | Not determined                  | <b>Heat Value:</b>           | Not determined |
| <b>Sat. Vap. Conc.:</b>       | Not determined                  | <b>Freezing/Melting Pt.:</b> | Not determined |
| <b>Boiling Point:</b>         | > 260.0 °C (500.0 °F)           | <b>Flash Point:</b>          | DNA            |
| <b>Flammability:</b>          | (solid, gas): Non-flammable     | <b>Octanol:</b>              | Not determined |
| <b>Partition Coefficient:</b> | Not determined                  | <b>Vapor Density:</b>        | (air = 1): > 1 |
| <b>Vapor Pressure:</b>        | (mm Hg @ 20 °C): Not determined | <b>VOC:</b>                  | < 12 g/l       |
| <b>pH:</b>                    | Not determined                  | <b>Bulk Density:</b>         | Not determined |
| <b>Evap. Rate:</b>            | (N-Butyl Acetate = 1): < 1      | <b>Auto-Ignition Temp:</b>   | Not determined |
| <b>Molecular weight:</b>      | MIXTURE                         |                              |                |

**RJLR8-2W and Curing Agent**

SDS Number: 747

Revision Date: 10/26/2016

Page 6 of 9

**Decomp Temp:** Not determined**UFL/LFL:** Not determined**10 STABILITY AND REACTIVITY**

**Stability:** Product is stable under normal conditions.  
**Conditions to Avoid:** Incompatibilities, flames, ignition sources.  
**Materials to Avoid:** Strong acids, strong bases, strong oxidizing agents, strong reducing agents, Mercaptans, Amines, Hydrogen Fluoride and Acid Anhydrides.  
**Hazardous Decomposition:** If incinerated, product may release the following: Carbon Oxides, Hydrogen Chloride gas, Hydrogen Cyanide gas, Magnesium Oxides, Nitrogen Oxides (NOx), Silicon Oxides and Sulfur Oxides.  
**Hazardous Polymerization:** Will not occur.

**11 TOXICOLOGICAL INFORMATION**

**Component(s):** Trade Secret 1  
**CAS No(s):** N/A  
**Acute Toxicity:**  
No data available.

**Component(s):** Trade Secret 2  
**CAS No(s):** N/A  
**Acute Toxicity:**  
No data available.

**Component(s):** Trade Secret 3  
**CAS No(s):** N/A  
**Acute Toxicity:**  
LD50 Oral - Rat: 13,600 mg/kg

**Skin Corrosion/Irritation:** May cause mild skin irritation through mechanical abrasion..

**Serious Eye Damage/Eye Irritation:** May cause serious eye irritation through mechanical abrasion.

**Respiratory or Skin Sensitation:** Prolonged or repeated exposure may cause an allergic skin reaction in certain, sensitive individuals (Trade Secret 1; Trade Secret 3).

**Germ Cell Mutagenicity:** No data available.

**Carcinogenicity:**

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.

**ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive Toxicity:** No data available.

## RJLR8-2W and Curing Agent

SDS Number: 747

Revision Date: 10/26/2016

Page 7 of 9

**Specific Target Organ Toxicity - Single Exposure:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure:** Causes damage to organs through prolonged or repeated exposure (Trade Secret 2).

**Aspiration Hazard:** No data available.

**Additional Information:**

Component: Trade Secret 1; RTECS: Withheld

Component: Trade Secret 2; RTECS: Withheld

Component: Trade Secret 3; RTECS: Withheld

## 12

## ECOLOGICAL INFORMATION

**Component(s):** Trade Secret 1

**CAS No(s):** N/A

**Toxicity:**

*Toxicity to fish:*

No data available.

*Toxicity to daphnia and other aquatic invertebrates:*

No data available.

*Toxicity to algae:*

No data available.

**Component(s):** Trade Secret 2

**CAS No(s):** N/A

**Toxicity:**

*Toxicity to fish:*

No data available.

*Toxicity to daphnia and other aquatic invertebrates:*

No data available.

*Toxicity to algae:*

No data available.

**Component(s):** Trade Secret 3

**CAS No(s):** N/A

**Toxicity:**

*Toxicity to fish:*

No data available.

*Toxicity to daphnia and other aquatic invertebrates:*

No data available.

*Toxicity to algae:*

No data available.



**RJLR8-2W and Curing Agent**

SDS Number: 747

Revision Date: 10/26/2016

Page 8 of 9

**Persistence and Degradability:**

No data available.

**Bioaccumulative potential:**

No data available.

**Mobility in Soil:**

No data available.

**Results of PBT and vPvB assessment:**

Not required/conducted.

**Other Adverse Effects:**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

**13****DISPOSAL CONSIDERATIONS**

Product: Hazardous wastes shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution, release into the environment or damage to people and animals. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated Packaging: Dispose of as unused product.

**14****TRANSPORT INFORMATION****DOT (US)**

Non-regulated material

**IMDG**

Non-regulated material

**IATA**

Non-regulated material

**15****REGULATORY INFORMATION****COMPONENT / (CAS/PERC) / CODES**  
-----

\*Trade Secret 1 (N/A 20-50%) NJHS, PA, SARA311/312, TSCA

\*Trade Secret 2 (N/A 10-40%) MASS, NJHS, PA, SARA311/312, TSCA

\*Trade Secret 3 (N/A 5-20%) NJHS, PA, SARA311/312, TSCA

**REGULATORY KEY DESCRIPTIONS**  
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MASS = MA Massachusetts Hazardous Substances List

NJHS = New Jersey Right to Know Hazardous Substances

PA = PA Right-To-Know List of Hazardous Substances





# Safety Data Sheet (SDS)

RJR Technologies, Inc.

## RJLR8-2W and Curing Agent

SDS Number: 747

Revision Date: 10/26/2016

Page 9 of 9

SARA311/312 = SARA 311/312 Toxic Chemicals  
TSCA = Toxic Substances Control Act

16

### OTHER INFORMATION

#### Disclaimer:

The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material in any process. The information set forth herein is furnished free of charge and is based on technical data that RJR Technologies, Inc. believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside of RJR Technologies, Inc.'s control, RJR Technologies, Inc. makes no warranties, expressed or implied, and assumes no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under, or a recommendation to infringe upon, any patents.

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