

# MSDS

# Material Safety Data Sheet

Date prepared: August, 29<sup>th</sup>, 2013

Date revised: N/A (first edition)

## Section 1 - General Information

**Chemical Name:** Riboflavin  
**Synonyms:** Vitamin B2; (-)-Riboflavin; Vitamin G  
**CAS Reg. Number:** 83-88-5  
**Catalog Number:** 1ST1505  
**Manufacturer's Name:** A Chemtek, Inc.  
100 Barber Avenue  
Worcester, MA 01606, USA  
**Telephone Number:** 508-471-4121  
**Fax Number:** 508-845-9201

*For R & D use only*

## Section 2 - Hazardous Ingredients/Identity Information

### Classification of the substance or mixture

Not a hazardous substance or mixture.

### GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

### HMIS Classification

**Health hazard:** 0  
**Chronic Health Hazard:** \*  
**Flammability:** 0  
**Physical hazards:** 0

### NFPA Rating

**Health hazard:** 0  
**Fire:** 0  
**Reactivity Hazard:** 0

## Section 3 - Composition/Information on Ingredients

**Formula:** C<sub>17</sub>H<sub>20</sub>N<sub>4</sub>O<sub>6</sub>  
**Molecular Weight:** 376.36 g/mol  
**CAS-No.** 83-88-5

## Section 4 - First Aid Measures

**EYE CONTACT:** Flush eyes with water as a precaution.  
**SKIN CONTACT:** Wash off with soap and plenty of water.  
**INHALATION:** If breathed in, move person into fresh air. If not breathing, give artificial respiration.  
**INGESTION:** Never give anything by mouth to an unconscious person. Rinse mouth with water.

## Section 5 - Fire-Fighting Measures

### Flammable properties

**Flash point** not available  
**Ignition temperature** not available

### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### Special protective equipment for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

## Section 6 - Accidental Release Measures

**Personal precautions** Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.  
**Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.  
**Methods for cleaning up** Sweep up and shovel. Keep in suitable, closed containers for disposal.

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## Section 7 - Handling and Storage

**Handling** Avoid inhalation of vapour or mist.  
**Storage** Keep container tightly closed in a dry and well-ventilated place. Keep in a dry place.

## Section 8 - Exposure Controls/Personal Protection

**Components with workplace control parameters**

**Personal protective equipment**

**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** Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection** Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

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

## Section 9 - Physical and Chemical Properties

**Appearance:** Form Solid  
Color Dark yellow

**Safety data**

pH: not available  
Melting point: Melting point/range: 290 °C (554 °F)  
Boiling point: not available  
Flash point: not available  
Ignition temperature: not available  
Lower explosion limit: not available  
Upper explosion limit: not available  
Water solubility: not available

## Section 10 - Stability and Reactivity

**Storage stability** Stable under recommended storage conditions.  
**Materials to avoid** Strong oxidizing agents.  
**Hazardous decomposition products** Hazardous decomposition products formed under fire conditions. Carbon oxides, nitrogen oxides (NOx).

## Section 11 - Toxicological Information

**Acute toxicity:**  
Oral LD50  
LD50 Oral - rat - > 10,000 mg/kg  
Inhalation LC50  
not available  
Dermal LD50  
not available  
Other information on acute toxicity

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**Irritation and corrosion:** not available

**Sensitization:** not available

**Respiratory or skin sensitization:** not available

**Chronic exposure** 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, ACGIH, NTP, or OSHA.

## Section 12 - Ecological Information

**Elimination information (persistence and degradability)**

not available

**Ecotoxicity effects:** not available

**Further information on ecology:** not available

## Section 13 - Disposal Considerations

**Product** Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging:** Dispose of as unused product.

## Section 14- Transport Information

**DOT (US):**

Not dangerous goods

**IMDG:**

Not dangerous goods

**IATA:**

Not dangerous goods

## 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**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

No SARA Hazards

**Massachusetts Right To Know Components**

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

**Pennsylvania Right To Know Components**

Riboflavin CAS-No. 83-88-5 Revision Date

**New Jersey Right To Know Components**

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**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 above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. A Chemtek shall not be held liable for any damage resulting from handling or from contact with the above product.