## SECTION 1 - CHEMICAL IDENTIFICATION

| | |
|---|---|
| PRODUCT NAME: | Riboflavin (Vitamin B2) |
| RPI CATALOG #: | R64040 |
| SUPPLIER'S NAME: | Research Products International Corp. |
| SUPPLIERS ADDRESS: | 410 N Business Center Drive Mount Prospect, Il 60056 |
| EMERGENCY CONTACT: | 1-800-424-9300 |
| OTHER INFORMATION: | 847-635-7330 |

## SECTION 2 - HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Not hazardous

**Signal word**: None

**Hazard statement(s):** Not hazardous

**Precautionary statements:**

| | |
|---|---|
| P101 | If medical advice is needed, have product container or label at hand |
| P102 | Keep out of reach of children. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

## SECTION 3- COMPOSITION/INFORMATION ON INGREDIENTS

| | |
|---|---|
| CAS Number: | 83-88-5 |
| EINECS Number: | 201-507-1 |
| Formula | $C_{17}H_{20}N_4O_6$ |
| Molecular Weight | 376.36 g/mol |

## SECTION 4 - FIRST-AID MEASURES

### 4.1 Description of first aid measures

**General advice:** Consult a doctor and show this safety data sheet.

i. **If inhaled:** Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.

ii. **In case of skin contact:** Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.

iii. **In case of eye contact:** Flush with copious amounts of water for at least 15 minutes. Consult a doctor.

iv. **If swallowed:** Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.

**4.2 Most important symptoms and effects, both acute and delayed:** To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

**4.3 Indication of immediate medical attention and special treatment needed:** Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

## SECTION 5 - FIRE FIGHTING MEASURES

**5.1 Extinguishing media**
**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

**5.2 Special hazards arising from the substance or mixture:** Carbon oxides, nitrogen oxides (NOx).

**5.3 Precautions for fire-fighters:** Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

**5.4 Further information:** No data available

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures:** Do not take action without suitable protective clothing - see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust or gas.

**6.2 Environmental precautions:** Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up:** Cover spillage with suitable absorbent material. Using non-spark tools, sweep up material and place in an appropriate container. Decontaminate spill site with 10% caustic solution and ventilate area until after disposal is complete. Hold all material for appropriate disposal as described under section 13 of SDS.

**6.4 Reference to other sections:** For required PPE see section 8. For disposal see section 13.

## SECTION 7 - HANDLING AND STORAGE

**7.1 Precautions for safe handling:** Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.

**7.2 Conditions for safe storage, including any incompatibilities:** Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use. Keep in a dry place. Store at room temperature.

**7.3 Specific end use(s):** Apart from the uses mentioned in section 1 no other specific uses are stipulated.

## SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**
**Components with workplace control parameters:** Contains no substances with occupational exposure limit values.

**8.2 Exposure Controls**

i. **Appropriate engineering controls:** General industrial hygiene practice.

**8.3 Personal protective equipment**

i. **Eye/face 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).

ii. **Skin protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166

iii. **Body Protection:** Wear appropriate protective clothing. Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

iv. **Respiratory Protection:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

v. **Control of environmental exposure:** No special environmental precautions required.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

| | | | |
|---|---|---|---|
| **Appearance** | Yellow- Orange Solid | **Vapor Pressure** | No Data Available |
| **Odor** | Odorless | **Vapor Density** | No Data Available |
| **Odor Threshold** | No Data Available | **Relative Density** | No Data Available |
| **pH (0.07g/l water @ 20°C)** | 5.5-7.2 | **Water Solubility** | No Data Available |
| **Melting / Freezing Point** | 290 °C | **Partition Coefficient** | No Data Available |
| **Initial Boiling Point Range** | No Data Available | **Auto-Ignition Temperature** | No Data Available |
| **Flash Point** | No Data Available | **Decomposition Temperature** | No Data Available |
| **Evaporation Rate** | No Data Available | **Viscosity** | No Data Available |
| **Flammability (Solid, Gas)** | No Data Available | **Explosive Properties** | No Data Available |
| **Upper / Lower Flammability or Explosive Limits** | No Data Available | **Oxidizing Properties** | No Data Available |

## SECTION 10 - STABILITY AND REACTIVITY

**Stability:** Stable under recommended storage conditions.
**Hazardous Decomposition Products/Hazardous Polymerization:** No Data Available**.**
**Incompatibilities:** strong oxidizing agent.

## SECTION 11 - TOXICOLOGICAL INFORMATION

**Acute Toxicity**

| LD50 Oral | LD50 Dermal | LC50 Inhalation | LD50 Intraperitonea |
|---|---|---|---|
| > 10,000 mg/kg (Rat) | Not Listed | >5.4 mg/L/4h (rat) | Not Listed |

## SECTION 12 - ECOLOGICAL INFORMATION

**Ecotoxicity:** No data available
**Persistence and degradability/Bioaccumlative potential:** No data available
**Mobility in soil/Results of PBT and vPvB assessment:** No data available
**Other adverse effects:** No data available
**Chronic Toxicity:** There are no known carcinogenic chemicals in this product

## SECTION 13 - DISPOSAL CONSIDERATIONS

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## SECTION 14 - TRANSPORT INFORMATION

| DOT | TDG | IATA | IMDG/IMO |
|---|---|---|---|
| Not regulated | Not regulated | Not regulated | Not regulated |

## SECTION 15 - REGULATORY INFORMATION

**INTERNATIONAL INVENTORIES**

| TSCA | DSL | NDSL | ELINCS | NLP | PICCS | ENCS | AICS | CHINA | KECL |
|---|---|---|---|---|---|---|---|---|---|
| Listed | Listed | - | - | | Listed | Listed | Listed | Listed | Listed |

**USA Federal Regulation**

**SARA 313/SARA 311/312 HAZARDOUS CATEGORIZATION:** No hazard class
**Clean Water Act/ Clean Air Act:** Not Applicable
**TSCA 12(b)/OSHA:** Not Applicable
**California Proposition 65:** This product does not contain any Proposition 65 chemicals.

**STATE RIGHT TO KNOW**

| Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---|---|---|---|---|
| - | Listed | Listed | - | - |

**HMIS Rating**

| Health hazard | Chronic Health Hazard | Flammability | Physical Hazard |
|---|---|---|---|
| 0 | | 0 | 0 |

**NFPA Rating**

| Health Hazard | Fire Hazard | Reactivity Hazard |
|---|---|---|
| 0 | 0 | 0 |

**US DEPARTMENT OF TRANSPORTATION**

| REPORTABLE QUANTITY (RQ) | DOT MARINE POLLUTANT | DOT SEVER MARINE POLLUTANT |
|---|---|---|
| No | No | No |

**U.S. DEPARTMENT OF HOMELAND SECURITY:** This product does not contain any DHS chemicals.

**Canada:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

**This SDS complies with the requirements of Regulation (EC).**

## 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. Research Products International Corp. shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. This product is sold for laboratory research and development purposes use only.