

# Material Safety Data Sheet

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## Section 1: Product Identification

**MSDS Code: 835 - liquid**

**Name: Rosin Flux**

**Related Part Numbers: 835-100ML; 835-1L; 835-4L**

Use: Soldering flux for electrical and electronic applications.

## Section 2: Hazardous Ingredients

CAS#	Chemical Name	Percentage by weight	ACGIH TWA	Osha Pel	Osha Stel
8050-09-7	Rosin	46-51	N/E	N/E	N/E
78-92-2	2-butanol	25-27.5	100ppm	100ppm	N/E
64-17-5	Ethanol	23-25.3	1000ppm	1000ppm	N/E

## Section 3: Hazards Identification

**Eyes:** Liquid and smoke from soldering can cause eye irritation.

**Skin:** May cause skin irritation.

**Inhalation:** Fumes during soldering may irritate mucous membranes and respiratory system. High concentrations can cause headache, dizziness, narcosis and nausea.

**Ingestion:** May cause burning sensation in the digestive tract.

**Chronic:** Prolonged or repeated skin contact can result in a rash.

## Section 4: First Aid Measure

**Eyes:** Remove contact lenses. Flush with water. Get medical aid.

**Skin:** Wash skin with soap and water.

**Inhalation:** Immediately remove from exposure to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Ingestion:** Do not induce vomiting. If conscious, give 1-2 glasses of water. Get medical aid.

## Section 5: Fire Fighting Measures

**Autoignition Temperature:** N/E      **Flash Point:** 12°C (53°F)      **LEL / UEL:** 2.0/12.0%

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or alcohol foam.

**General Information:** Will burn if involved in a fire.

## Section 6: Accidental Release Measures

**Spill Procedure:** Remove all sources of ignition. Provide adequate ventilation. Wear appropriate personal protection. Sprinkle absorbent compound onto spill, then sweep into a plastic or metal container. Wipe up further residue with paper towel and place in container. Wash spill area with soap and water.

## Section 7: Handling and Storage

**Handling:** Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Do not ingest or inhale. Do not expose container to heat or flame.

**Storage:** Keep away from sources of ignition. Store in a cool, dry, well-ventilated area, away from incompatible substances.

## Section 8: Exposure Controls

**Routes of entry:** Eyes, ingestion, inhalation, and skin.

**Ventilation:** Use adequate general or local exhaust ventilation to keep airborne concentrations below exposure limits.

**Personal Protection:** Wear appropriate protective eyeglasses or chemical safety goggles. Wear appropriate protective clothing to prevent skin contact. Use a NIOSH approved respirator when necessary.

## Section 9: Physical and Chemical Properties

<b>Physical State:</b>	Liquid	<b>Odor:</b>	Mild Ethereal	<b>Solubility:</b>	Partially Soluble	<b>Evaporation Rate:</b>	1.9 (n-butyl Acetate=1)		
<b>Boiling Point:</b>	78°C@ 760mmHg	<b>Specific Gravity:</b>	0.93	<b>Vapor Pressure:</b>	40.00 mmHg @20°C	<b>Vapor Density:</b>	1.8 (Air=1)	<b>pH:</b>	N/a

## Section 10: Stability and Reactivity

**Stability:** Stable at normal temperatures and pressures.

**Conditions to avoid:** Temperatures over 40°C, ignition sources, open flame and incompatible materials.

**Incompatibilities:** Strong oxidizers

**Polymerization:** May occur.

**Decomposition:** May emit toxic fumes of carbon dioxide and carbon monoxide.

## Section 11: Toxicological Information

<b>Sensitization:</b> (effects of repeated exposure)	Not known to.
<b>Carcinogenicity:</b> (risk of cancer)	Not known to.
<b>Teratogenicity:</b> (risk of malformation in an unborn fetus)	Not known to.
<b>Reproductive Toxicity:</b> (risk of sterility)	Not known to.
<b>Mutagenicity:</b> (risk of heritable genetic effects)	Not known to.

<b>Lethal Exposure Concentrations:</b>	<b>Ingestion (LD50):</b>	<b>Inhalation (LC50):</b>	<b>Skin (LD50):</b>	<b>Inhalation (TCLo):</b>
Rosin	2.2 mg/kg Mouse	110 mg/m <sup>3</sup> Rat	N/A	N/A
2-butanol	2193 mg/kg Rat	48500 mg/m <sup>3</sup> /4H Rat	>2 gm/kg Rat	5000 ppm/7H Rat
Ethanol	7060 mg/kg Rat	20,000 ppm/10H Rat	N/A	50000 mg/m <sup>3</sup> /2H Mouse

## Section 12: Ecological Information

### General Information:

Volatile Organic Compounds, % by weight:	50%
Volatile Organic Compounds, grams per litre:	465 g/l

## Section 13: Disposal Information

**General Information:** Dispose of in accordance with all local, provincial, state, and federal regulations. Water runoff can cause environmental damage.

## Section 14: Transportation Information

### Ground Canada: (sizes 1 liter or less)

Classified as **Consumer Commodity**.

**Recommend Shipper be trained and certified. Refer to TDG regulations** (Canadian Transportation of Dangerous Goods regulations).

### Ground USA: (sizes 1 liter or less)

Classified as **ORM-D**.

**Recommend Shipper be trained and certified. Refer to USA CFR 49 Regulations** (Parts 100 to 185).

### Ground Canada and USA: (all sizes larger than 1 liter)

**Shipper must be trained and certified. Refer to TDG regulations** (Canadian Transportation of Dangerous Goods regulations). **Refer to USA CFR 49 Regulations** (Parts 100 to 185).

UN number: **1987**, Shipping Name: **Alcohols, N.O.S. (Ethanol)**, Class: **3**, Packing Group: **II**, Flash Point: **12°C**.

### Air: (all sizes).

**Shipper must be trained and certified. Refer to IATA Dangerous Goods Regulations.**

UN number: **1987**, Shipping Name: **Alcohols, N.O.S. (Ethanol)**, Class: **3**, Packing Group: **II**, Flash Point: **12°C**.  
 Subsidiary Risk – nil, Recommend using original MG Chemicals certified outer cartons. Tape all seams on the carton. Hazard Label required – Flammable Liquid. A double arrow orientation label is required and is already printed on the original outer carton.

### Sea - All Sizes:

**Shipper must be trained and certified. Refer to IMDG regulations.**

UN number: **1987**, Shipping Name: **Alcohols, N.O.S. (Ethanol)**, Class: **3**, Packing Group: **II**, Flash Point: **12°C**.  
 Storage category "A", segregation as for class 9 but away from sources of heat and separated from goods of class 1 except for those in division 1.4.

## Section 15: Regulatory Information

### CANADA

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations.

#### **DSL**

All ingredients in this product are listed on the Domestic Substances List

#### **Health Canada**

Products produced by MG Chemicals intended for retail display conform to the Canadian Consumer Labeling regulations.

#### **Industry and Science Canada**

MG Labels products intended for the workplace to conform to WHMIS labeling regulations. Product identification, net quantity declaration, minimum printing type size heights, and packaging of this product is in compliance.

#### **WHMIS**

This product belongs to the following categories: **B2, D2B**

#### **CAA** (Clean Air Act, USA)

This product does not contain any class 1-ozone depletors.

This product does not contain any class 2-ozone depletors.

This product does not contain any chemicals listed as hazardous air pollutants.

### USA

#### **SARA** (Superfund Amendments and Reauthorization Act of 1986, USA, 40 CFR 372.4)

This product does not contain toxic chemicals subject to the reporting requirements of section 313 of Title III of the superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372:

#### **EPCRA** (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45)

This product does not contain toxic chemicals subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372:

#### **TSCA** (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

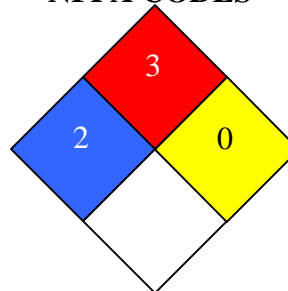
#### **California Proposition 65** (Chemicals known to cause cancer or reproductive toxicity, May 1, 1997 revision, USA)

This product does contain chemicals known to the state to cause reproductive toxicity and cancer respectively.

### HMIS RATING

<b>HEALTH:</b>	1
<b>FLAMMABILITY:</b>	3
<b>PHYSICAL HAZARD:</b>	0
<b>PERSONAL PROTECTION:</b>	

### NFPA CODES



### EUROPE

#### **RoHS**

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, or PBDE's, and complies with European RoHS regulations.

#### **WEEE**

This product is not a piece of electrical or electronics equipment, and is therefore not governed by this regulation.

## Section 16: Other Information

**Definitions:** N/A = not applicable, N/E = not established

**Disclaimer:** This material safety data sheet is provided as an information resource only. M.G. Chemicals believes the information contained herein is accurate and compiled from reliable sources. It is the responsibility of the user to verify its validity. The buyer assumes all responsibility of using and handling the product in accordance with federal, state, and local regulations.