

RA FLUX PASTE

8342

# Safety Data Sheet

## Section 1: Identification

### Product Identifier and Other Means of Identification

**Product Name:** RA Flux Paste**SDS Code:** 8342**Related Part #** 8342-50G

### Recommended Use and Restriction on Use

**Use:** Flux paste**Uses Advised Against:** Not available

### Details of Manufacturer or Importer

**Manufacturer**

MG Chemicals  
1210 Corporate Drive  
Burlington, Ontario L7L 5R6  
CANADA

MG Chemicals (Head Office)  
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Surrey, British Columbia V4N 4E7  
CANADA

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### Emergency Phone Number

**For hazardous material incidents ONLY**—leaks, spills, fires, exposures or accidentsUSA or CANADA: Call CHEMTREC ☎: **+1-800-424-9300****For emergencies involving dangerous goods;** Collect 24/7CANADA: Call CANUTEC ☎: **+1-613-996-6666** or **\*666** on cellular phones

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**Section 2: Hazard(s) Identification**


**Classification of the Hazardous Material**

**GHS Categories**

Criteria		Category	Signal Word	Pictograms
Sensitization	Respiratory	1	Danger	Health
Sensitization	Skin	1	Warning	Exclamation

*Note:* The degree of severity is ranked within each hazard class from 1 (Highest Severity) to up to 5 (Lowest Severity), which is opposite to HMIS and NFPA conventions. Severity category rankings do not allow comparisons between classes.

**Label Elements**

<b>Signal Word</b>	<b>DANGER</b>
<b>Pictograms</b>	<b>Hazard Statements</b>
	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled H317: May cause an allergic skin reaction
<b>Prevention</b>	<b>Precautionary Statements</b>
P102	Keep out of reach of children.
P261	Avoid breathing vapors/fumes.
P284	In case of inadequate ventilation, wear respiratory protection.
P280	Wear protective gloves.
P272	Contaminated work clothing should not be allowed of the workplace.
<b>Response</b>	<b>Precautionary Statements</b>
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.

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<b>Disposal</b>	<b>Precautionary Statements</b>
P501	Dispose of contents/container in accordance to local/regional/international regulations.

**Hazards Not Otherwise Classified**

<b>Other Criteria</b>	<b>Hazard Statements/Precautionary Statement</b>	<b>Signal Word</b>	<b>Pictograms</b>
None	None	None	None

**Section 3: Composition/Information on Ingredients**

<b>CAS #</b>	<b>Chemical Name</b>	<b>%(weight)</b>
8012-95-1	paraffin oils	10%
8050-09-7	rosin, colophony	5%
505-48-6	suberic acid	3%
110-15-6	succinic acid	2%

**Section 4: First-Aid Measures**

<i>Exposure Condition</i>	<i>GHS Code: Precautionary Statement</i>
<b>IF INHALED</b>	P304 + P340, P342 + P311
<b>Immediate Symptoms</b>	<i>IF exposed to solder fumes: coughing, sore throat, wheezing, difficulty breathing</i>
<b>Response</b>	Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
<b>IF ON SKIN</b>	P302 + P352, P333 + P313, P362 + P364
<b>Immediate Symptoms</b>	<i>redness, mild irritation, rash</i>
<b>Response</b>	Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

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<b>IF IN EYES</b>	P305 + P351 + P338
<b>Immediate Symptoms</b>	<i>mild irritation</i>
<b>Response</b>	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>IF SWALLOWED</b>	P301 + P330, P331
<b>Immediate Symptoms</b>	<i>not available</i>
<b>Response</b>	Rinse mouth. Do not induce vomiting.

**Section 5: Fire-Fighting Measures**

<b>Extinguishing Media</b>	In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Specific Hazards</b>	Not flammable or combustible, but burns if involved in a fire.
<b>Combustion Products</b>	Produces carbon oxides (CO, CO <sub>2</sub> ) and nitrogen oxides (NO <sub>x</sub> ).
<b>Fire-Fighter</b>	Wear self-contained breathing apparatus and full fire-fighting turn-out gear.

**Section 6: Accidental Release Measures**

<b>Personal Protection</b>	Use personal protection recommended in Section 8.
<b>Precautions for Response</b>	Avoid breathing vapors/fumes.
<b>Environmental Precautions</b>	Avoid releasing to the environment.
<b>Containment Methods</b>	Not applicable—not readily flowable
<b>Cleaning Methods</b>	Collect paste in a sealable, solvent-resistant container. Sprinkle inert absorbent compound onto spill, then sweep into the container. Wipe up further residue with paper towel and place dirty towels in container. Wash spill area with soap and water to remove the last traces of residue.
<b>Disposal Methods</b>	Dispose spill waste according to Section 13.

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**Section 7: Handling and Storage**

**Prevention** Keep out of reach of children.  
 Avoid breathing fumes/vapors.  
 Contaminated work clothing should not be allowed of the workplace.

**Handling** In case of inadequate ventilation, wear respiratory protection.  
 Take off contaminated clothing and wash it before reuse.  
 Wear protective gloves.  
 Wash hands thoroughly after handling.

**Storage** Keep in a dry and clean area, away from incompatible substances.

**Section 8: Exposure Controls/Personal Protection**

**Substances with Occupational Exposure Limit Values**

Chemical Name	Country	Long Term Exposure Limits (PEL)	Short Term Exposure Limits (STEL)
paraffin oils <i>oil mist, mineral</i>	ACGIH U.S.A. OSHA PEL Canada AB Canada BC Canada ON Canada QC	Not established 5 mg/m <sup>3</sup> Not established Not established Not established 5 mg/m <sup>3</sup>	Not established Not established Not established Not established Not established 10 mg/m <sup>3</sup>
rosin, colophony <i>(thermal decomposition)</i>	ACGIH U.S.A. OSHA PEL Canada AB Canada BC Canada ON Canada QC	(L) Not established Not established (L) (L) Not established	Not established Not established Not established Not established Not established

*Note:* The ACGIH<sup>1</sup>, OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from by RTECS<sup>2</sup> database and data from suppliers' SDS were also consulted. Short term exposure limits (STEL) are for 15 min and long term permissible exposure limits (PEL) for 8 h.

(L) Exposure by all routes should be carefully controlled to levels as low as possible.

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**RA FLUX PASTE****8342****Engineering Controls****Ventilation**

Keep airborne concentrations below the occupational exposure limits (OEL). Keep overall exposure as low as possible.

Soft soldering temperatures (<450 °C) are generally too low to generate significant amounts of metal vapors; however, metal oxide fumes/dust or flux decomposition fumes can occur. The volatilization and degradation of the rosin flux during soldering may lead to respiratory sensitization.

**Recommendation:** For frequent or prolonged soldering processes, use of a local exhaust system to avoid exposure to thermal decomposition products.

**Personal Protective Equipment****Eye protection**

Wear appropriate protective eyeglasses or chemical safety goggles.

**Recommendation:** Ensure that glasses have side shields for lateral protection.

**Skin Protection**

For likely contacts, use of protective nitrile gloves or other chemically resistant gloves.

Thermal resistant gloves should be worn instead if contact with molten metal is expected.

**Respiratory Protection**

For over-exposures up to 10 x OEL of vapors/fumes, wear respirator such as a half-mask respirator with organic vapor cartridges and particulate filter.

Above 10 x OEL, use a positive-pressure, air-supplied respirator or a self-contained breathing apparatus.

**RECOMMENDATION:** Consult your local safety supply store to ensure that your respirator has a NIOSH (U.S.) approved filter cartridges appropriate for the ingredients listed in Section 3. The respirator should be fitted to the employee by a professional. Ensure vapor cartridges are stored in sealed plastic bags when not being used.

**General Hygiene Considerations**

Wash hands thoroughly with water and soap after handling.

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**Section 9: Physical and Chemical Properties**

<b>Physical State</b>	Solid	<b>Lower Flammability Limit</b>	Not available
<b>Appearance</b>	Amber paste	<b>Upper Flammability Limit</b>	Not available
<b>Odor</b>	Mild	<b>Vapor Pressure @20 °C</b>	Not available
<b>Odor Threshold</b>	Not available	<b>Vapor Density</b>	Not available
<b>pH</b>	Not available	<b>Specific Gravity @25 °C</b>	1.28
<b>Freezing/Melting Point</b>	Not available	<b>Solubility in Water</b>	Not available
<b>Boiling Point</b>	Not available	<b>Partition Coefficient</b>	Not available
<b>Flash Point</b>	Not available	<b>Auto-ignition Temperature</b>	Not available
<b>Evaporation Rate</b>	Not available	<b>Decomposition Temperature</b>	Not available
<b>Flammability (solid, gas)</b>	Not available	<b>Viscosity @40 °C</b>	39 000 cP

**Section 10: Stability and Reactivity**

<b>Reactivity</b>	Rosin can be oxidized in contact with air and heat. Skin sensitization may occur following oxidation of the chemicals after prolonged storage.
<b>Chemical Stability</b>	Chemically stable at normal temperatures and pressures
<b>Conditions to Avoid</b>	Ignition sources, excessive heat, and incompatible substances
<b>Incompatibilities</b>	Strong oxidizing agents
<b>Polymerization</b>	Will not occur
<b>Decomposition</b>	Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5.

**RA FLUX PASTE****8342****Section 11: Toxicological Information****Routes of Exposure**

Inhalation, Skin contact, Eye contact, and Ingestion

**Symptoms Summary**

<b>Eyes</b>	May cause mild irritation.
<b>Skin</b>	May cause redness, rash and mild irritation.
<b>Inhalation</b>	Exposure to the rosin flux fumes may cause wheezing.
<b>Ingestion</b>	Not available
<b>Chronic</b>	Prolonged or repeated exposure to the oxidized rosin flux may lead to skin sensitization and provoke asthma.

**Acute Toxicity (Lethal Exposure Concentrations)**

<b>Chemical Name</b>	<b>LD50 oral</b>	<b>LD50 dermal</b>	<b>LC50 inhalation</b>
paraffin oils	Not available	Not available	Not available
Rosin, colophony	2 800 mg/kg Rat	≥2 000 mg/kg Rat	Not available
suberic acid	Not available	Not available	Not available
succinic acid	2 260 mg/kg Rat	Not available	Not available

*Note:* Toxicity data from the RTECS<sup>2</sup> and ECHA databases were consulted. The data from supplier (M)SDS were also consulted.

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**RA FLUX PASTE****8342****Other Toxicological Effects**

<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/irritation</b>	Based on available data, the classification criteria are not met.
<b>Respiratory and skin sensitization</b> (allergic reactions)	The oxidized form of the rosin component causes skin and respiratory sensitization.
<b>Carcinogenicity</b> (risk of cancer)	Not classified or listed as a carcinogen by IARC, ACGIH, CA Prop 65, or NTP.
<b>Mutagenicity</b> (risk of heritable genetic effects)	Based on available data, the classification criteria are not met.
<b>Reproductive Toxicity</b> (risk to sex functions)	Based on available data, the classification criteria are not met.
<b>Teratogenicity</b> (risk of fetus malformation)	Based on available data, the classification criteria are not met.
<b>STOT-single exposure</b>	Based on available data, the classification criteria are not met.
<b>STOT-repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Although the mixture contains 10% of category 1 for aspiration hazard, the mixture has a kinematic viscosity of >20.5 mm <sup>2</sup> /s at 40 °C for the separation layer.

**Section 12: Ecological Information**

Ecological classifications are based on the IMDG/GHS criteria in conjunction with ecotoxicological data from our suppliers, the European Chemical Agency database (<http://echa.europa.eu>), and other reliable sources.

The paraffin oil is classified as a category 4 aquatic environmental hazard.

Based on available data for petrolatum, rosin, suberic acid, and succinic acid the GHS environmental toxicity classification criteria are not met.

**Acute Ecotoxicity**

Available toxicity data does not meet classification thresholds.

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**RA FLUX PASTE****8342****Chronic Ecotoxicity**

Available toxicity data does not meet classification thresholds.

**Biodegradability**

Not available

**Other Effects**

Not available

**Section 13: Disposal Considerations**

Dispose of contents in accordance with all local, regional, national, and international regulations.

**Section 14: Transport Information****Ground****Refer to TDG regulations** (Canadian Transportation of Dangerous Goods regulations);  
**USA DOT 49 CFR** (Parts 100 to 185) **Regulations.**

Not regulated

**Air****Refer to ICAO-IATA Dangerous Goods Regulations.**

Not regulated

**Sea****Refer to IMDG Regulations.**

Not regulated

**RA FLUX PASTE****8342****Section 15: Regulatory Information****Canada****Domestic Substance List (DSL)/Non-Domestic Substance Lists (NDSL)**

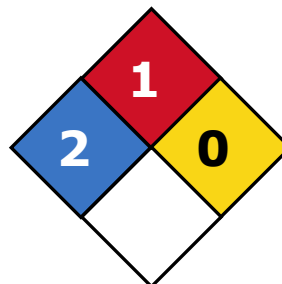
All hazardous ingredients are listed on the DSL/NDSL.

**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 are in compliance.

**USA****Other Classifications****HMIS® RATING**

<b>HEALTH:</b>	<b>2</b>
<b>FLAMMABILITY:</b>	<b>1</b>
<b>PHYSICAL HAZARD:</b>	<b>0</b>
<b>PERSONAL PROTECTION:</b>	

**NFPA® 704 CODES**

*Approximate HMIS and NFPA Risk Ratings Legend:*

0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

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

This product does not contain any class 1 ozone depleting substances.

This product does not contain any class 2 ozone depleting substances.

This product does not contain substances that are listed as hazardous air pollutants.

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

This product does not contain ingredients that 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.

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**California Proposition 65** (Chemicals known to cause cancer or reproductive toxicity, June 06, 2014 revision, USA).

This product does not contain any substances known to be listed in California.

**Europe**

**RoHS** (Restriction of Hazardous Substances Directive)

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

**WEEE** (Waste Electrical and Electronic Equipment Directive)

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

**Section 16: Other Information**

**SDS Prepared by** Regulatory Department

**Date of Creation** 17 August 2016

**Supersedes** 08 June 2016

**Reason for Changes:** Added respiratory sensitization to the classification.

**Reference**

1) ACGIH 2013 TLVs and BEIs: Based on the documentation of the threshold limit values for chemical substances and physical agents & biological exposure indices, American Conference of Governmental of Industrial Hygienist Cincinnati, OH (2013).

2) All toxicological data were checked against the RTECS (Registry of Toxic Effects of Chemical Substances®)

**Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists (USA)
EC50	Half maximal effective concentration
EL50	Half maximal effective loading
NOELR	No observable effect loading ratio
GHS	Globally Harmonized System of Classification of Labeling of Chemicals
LC50	Lethal Concentration 50%
LCLo	Lowest published lethal concentration
LD50	Lethal Dose 50%
PEL	Permissible Exposure Limit
STEL	Short-Term Exposure Limit
TCLo	Lowest published toxic concentration
TWA	Time Weighted Average
VOC	Volatile Organic Content

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**Technical Queries** Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at [www.mgchemicals.com](http://www.mgchemicals.com).

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