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Burlington, Ontario, Canada

RA ROSIN FLUX PASTE

## 8342

# Safety Data Sheet

## **Section 1: Identification**

#### **Product Identifier and Other Means of Identification**

**Product Name: 8342** 

Other Means of Identification: RA Rosin Flux Paste; Flux RA en Pâte

Related Part #8342-50G

#### **Recommended Use and Restriction on Use**

Use: Rosin activated flux paste

Uses Advised Against: Not available

## **Details of Manufacturer or Importer**

#### Manufacturer

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

#1-800-340-0772

FAX +1-800-340-0773

E-MAIL support@mgchemicals.com

WEB www.mgchemicals.com

MG Chemicals (Head Office) 9347-193 Street

Surrey, British Columbia V4N 4E7

**CANADA** 

+1-905-331-1396 FAX +1-905-331-2682 E-MAIL info@mgchemicals.com

**E-MAIL** (Competent Person): <a href="mailto:sds@mqchemicals.com">sds@mqchemicals.com</a>

## **Emergency Phone Number**

**For hazardous material incidents ONLY** (leaks, spills, fires, exposures or accidents) USA or CANADA—Call CHEMTREC at +1-800-424-9300

**For emergencies involving the transport of dangerous goods**; 24/7 service CANADA—Call CANUTEC collect at **+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 Eye Irritation	Skin	1 2A	Warning Warning	Exclamation 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**

Signal Word	DANGER
Pictograms	Hazard Statements
	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled
	H317: May cause an allergic skin reaction
	H319: Causes serious eye irritation
Prevention	Precautionary Statements
P102	Keep out of reach of children.
P261	Avoid breathing vapors and fumes.
P284	In case of inadequate ventilation, wear respiratory protection.
P280	Wear protective gloves and eye protection.
P264	Wash hands thoroughly after handling.
P272	Contaminated work clothing should not be allowed of the workplace.

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Response	Precautionary Statements
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P333 + P313	If skin irritation or rash occurs: Get medical advice or attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice or attention.
Disposal	Precautionary Statements
P501	Dispose of contents in accordance to local, regional, national, and international regulations.

# **Hazards Not Otherwise Classified**

Other Criteria	Hazard Statements/Precautionary Statement	Signal Word	Pictograms
None	None	None	None

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

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

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Section 4: First-Aid Measures			
Exposure Condition	GHS Code: Precautionary Statement		
IF INHALED	P304 + P340, P342 + P311		
Immediate Symptoms	IF exposed to solder fumes: coughing, sore throat, wheezing, breathing difficulty		
Response	Remove person to fresh air and keep comfortable for breathing.		
	If experiencing respiratory symptoms: Call a POISON CENTER or doctor.		
IF ON SKIN	P302 + P352, P333 + P313, P362 + P364		
Immediate Symptoms	redness, mild irritation, rash		
Response	Wash with plenty of water.		
	If skin irritation or rash occurs: Get medical advice or attention.		
	Take off contaminated clothing and wash it before reuse.		
IF IN EYES	P305 + P351 + P338, P337 + P313		
Immediate Symptoms	serious irritation		
Response	Rinse cautiously with water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.		
	If eye irritation persists: Get medical advice/attention.		
	P301 + P330, P331		
IF SWALLOWED	1301 1 1330,1331		
IF SWALLOWED  Immediate Symptoms	Low toxicity		

# **Section 5: Fire-Fighting Measures**

Extinguishing Media	In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Specific Hazards	Not flammable nor combustible, but burns if involved in a fire.
<b>Combustion Products</b>	Produces carbon oxides (CO, $CO_2$ ), rosin solder pyrolysis products and nitrogen oxides ( $NO_x$ ).
Fire-Fighter	Wear self-contained breathing apparatus and full fire- fighting turn-out gear.



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## **Section 6: Accidental Release Measures**

**Personal Protection** Use personal protection recommended in Section 8.

**Precautions for** 

Response

Avoid breathing vapors and fumes.

Environmental Precautions

Avoid releasing to the environment.

**Containment Methods** Not applicable—not readily flowable

**Cleaning Methods** 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.

**Disposal Methods** Dispose spill waste according to Section 13.

## **Section 7: Handling and Storage**

**Prevention** Keep out of reach of children.

Avoid breathing fumes and vapors.

Contaminated work clothing should not be allowed of the

workplace.

**Handling** In case of inadequate ventilation, wear respiratory protection.

Wear protective gloves and eye protection. Take off contaminated clothing and wash it before reuse.

Wash hands thoroughly after handling.

**Storage** Not available

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## **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 oil mist, mineral	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 (thermal decomposition)	ACGIH U.S.A. OSHA PEL Canada AB Canada BC Canada ON Canada QC	(S), (L), asthma Not established Not established (S), (L) (L) 0.1 mg/m <sup>3</sup>	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 the 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.

S—Sensitizer

L—No exposure limit, but keep exposure as low as possible.

## **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.

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## **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.

If contact with molten metal is likely, wear thermally resistant

gloves.

**Respiratory Protection** For over-exposures up to 10 x OEL of vapors or 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 and exposed skin thoroughly with water and soap after handling.



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## **Section 9: Physical and Chemical Properties**

Physical State	Solid	Lower Flammability Limit	Not available
Appearance	Yellow paste	Upper Flammability Limit	Not available
Odor	Mild piny odor	Vapor Pressure @20°C	Not available
Odor Threshold	Not available	Vapor Density	Not available
pH	Not available	Relative Density @25 °C	1.28
Freezing/Melting Point	Not available	Solubility in Water	Not available
Initial Boiling Point	Not available	Partition Coefficient n-octanol/water	Not available
Flash Point	Not available	Auto-ignition Temperature	Not available
Evaporation Rate	Not available	Decomposition Temperature	Not available

## **Section 10: Stability and Reactivity**

Not flammable

Reactivity	When rosin f	flux is exposed to soldering	temperatures	(350-400 °C)
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during normal conditions of use, it produces oxidized rosins. These

by-products are known skin and respiratory sensitizers.

Viscosity

@25 °C

**Chemical Stability** Chemically stable at normal temperatures and pressures

**Conditions to** 

**Flammability** 

(solid, gas)

Avoid

Ignition sources, excessive heat, and incompatible substances

**Incompatibilities** Strong oxidizing agents

**Polymerization** Will not occur

**Decomposition** Will not decompose under normal conditions. For thermal

decomposition, see combustion products in Section 5.

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## **Section 11: Toxicological Information**

## **Summary of Effects and Symptoms by Routes of Exposure**

**Eyes** May cause serious irritation.

**Skin** May cause redness, rash and mild irritation.

**Inhalation** Exposure to the rosin flux fumes may cause coughing, sore

throat, wheezing and breathing difficulties.

**Ingestion** Low toxicity

**Chronic** Prolonged or repeated exposure to the rosin flux oxides may

cause sensitization and asthma.

## **Acute Toxicity (Lethal Exposure Concentrations)**

Chemical Name	LD50	LD50	LC50
	oral	dermal	inhalation
paraffin oils	Not	Not	Not
	available	available	available
rosin, colophony	>7 600 mg/kg	>2 000 mg/kg	Not
	Rat	Rat	available
suberic acid	Not	Not	Not
	available	available	available
succinic acid	2 260 mg/kg	Not	Not
	Rat	available	available

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

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Other Toxicological Effects

Skin corrosion/irritation Based on available data, the classification criteria are

not met.

Serious eye damage/irritation Suberic acid and succinic acid can cause serious and

irritating effects to the eyes.

Respiratory and skin

sensitization

(allergic reactions)

Pure rosin is not a skin sensitizer according to reliable animal studies. However, the oxidized forms of rosin are sensitizers. Because of epidemiological studies and of the mandatory skin classification according to Annex VI in Europe, the classifications of skin and respiratory

sensitizer are maintained.

Carcinogenicity

(risk of cancer)

Mutagenicity

(risk of heritable genetic effects)

Not classified or listed as a carcinogen by IARC, ACGIH, CA Prop 65, or NTP. Based on available data, the classification criteria are

not met.

**Reproductive Toxicity** 

(risk to sex functions)

Based on available data, the classification criteria are

not met.

**Teratogenicity** 

(risk of fetus malformation)

Based on available data, the classification criteria are

not met.

**STOT-single exposure** 

Based on available data, the classification criteria are

not met.

**STOT-repeated exposure** 

Based on available data, the classification criteria are

not met.

**Aspiration hazard** 

Based on available data, the classification criteria are

not met.



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## **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 (<a href="http://echa.europa.eu">http://echa.europa.eu</a>), and other reliable sources.

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

Based on available data for rosin, suberic acid, and succinic acid the toxicity for the aquatic environment according to GHS classification criteria.

## **Acute Ecotoxicity**

Based on available data, the classification criteria are not met.

## **Chronic Ecotoxicity**

Based on available data, the classification criteria are not met.

## **Biodegradability**

Not available

#### Other Effects

Not available

## **Section 13: Disposal Considerations**

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



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# **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

## **Section 15: Regulatory Information**

#### Canada

#### **Domestic Substance List (DSL)/Non-Domestic Substance Lists (NDSL)**

All hazardous ingredients are listed on the DSL/NDSL.

#### Hazardous Products Act (R.S.C., 1985, c. H-3)

The safety data sheet and label comply with the Hazardous Product Act and WHMIS 2015.

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#### **USA**

#### Other Classifications

#### **HMIS® RATING**

HEALTH:	*	2
FLAMMABILITY:		1
PHYSICAL HAZARD:		0
PERSONAL PROTECTION:		

#### 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.

**California Proposition 65** (Chemicals known to cause cancer or reproductive toxicity, 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, PBDE's, DEHP, BBP, DBP, or DIBP and complies with European RoHS regulations.

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

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

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#### **Section 16: Other Information**

**SDS Prepared by** Regulatory Department

**Date of Creation** 19 October 2018 **Supersedes** 14 November 2017

Reason for Changes: Revision in compliance with HCS 2012 and WHMIS 2015.

#### Reference

- 1) ACGIH 2017 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 (2017).
- 2) All toxicological data were checked against the RTECS (Registry of Toxic Effects of Chemical Substances®)

#### **Abbreviations**

ACGIH EC50 EL50	American Conference of Governmental Industrial Hygienists (USA) Half maximal effective concentration 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  ${\sf FAQs}$ 

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