



# **Safety Data Sheet**

#### **Section 1: Identification**

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

**Product Name: 8341** 

Other Means of Identification: No Clean Flux Paste

**Related Part** # 8341-10ML, 8341-10MLCA, 8341B-10ML, 8341-50ML

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

Use: No clean flux paste

Uses Advised Against: Not available

#### **Details of Manufacturer or Importer**

#### Manufacturer

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

**FAX** +1-800-340-0772 +1-800-340-0773

**E-MAIL** <u>support@mgchemicals.com</u> **WEB** www.mgchemicals.com

**Distributor** 

Mouser Electronics 1000 North Main Street Mansfield, TX 76063

USA

**+1-817-804-3800** 

**E-MAIL** <u>info@mgchemicals.com</u>

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

## **Emergency Phone Number**

**For hazardous material incidents ONLY** (leaks, spills, fires, exposures or accidents) USA or CANADA—Call Verisk 3E at +1-866-519-4752 or +1-760-476-3962 (Service access code: 335388)

**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



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

## **Classification of the Hazardous Material**

## **GHS Categories**

Criteria	Category	Signal Word	Pictograms
Eye Corrosion	1	Danger	Corrosion

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
	H318: Causes serious eye damage
Prevention	Precautionary Statements
P102	Keep out of reach of children.
P280	Wear eye protection.
Response	Precautionary Statements
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor.
Disposal	Precautionary Statements
Not applicable	Not applicable

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## **Hazards Not Otherwise Classified**

Other Criteria	Hazard Statements/Precautionary Statement	Signal Word	Pictograms
Rosin Solder Fumes	Oxidized rosin-based solder fumes are capable of inciting occupational asthma in some pre-sensitized individuals.	Warning	Not applicable

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

CAS #	Chemical Name	%(weight)
65997-06-0	rosin, hydrogenated	42%
124-04-9	adipic acid	9%
95-14-7	benzotriazole	1%

## **Section 4: First-Aid Measures**

Exposure Condition	GHS Code: Precautionary Statement
IF IN EYES	P305 + P351 + P338, P337 + P313
Immediate Symptoms	eye corrosion
Response	Rinse cautiously with water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	Immediately call a POISON CENTER or doctor.
IF INHALED	P304 + P340
Immediate Symptoms	IF exposed to solder fumes: coughing
Response	Remove person to fresh air and keep comfortable for breathing.
IF ON SKIN	P302 + P352, P333 + P313
Immediate Symptoms	redness, mild irritation
Response	Wash with plenty of water.
	If skin irritation occurs: Get medical advice or attention.
IF SWALLOWED	P301 + P330, P331
Immediate Symptoms	Low toxicity—nausea, sore throat, diarrhea, dizziness, drowsiness
Response	Rinse mouth. Do not induce vomiting.

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

**Extinguishing Media** In case of fire: Use extinguishing media suitable for surrounding

materials.

In presence of molten metal, do NOT use water on fire.

Not flammable or combustible but burns if involved in a fire. **Specific Hazards** 

In a fire, this product can release irritating flux fumes.

**Combustion Products** Produces carbon oxides (CO, CO<sub>2</sub>), solder flux pyrolysis

products, and nitrogen oxides  $(NO_x)$ .

Fire-Fighter Wear self-contained breathing apparatus and full fire-fighting

turn-out gear.

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

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

**Precautions for** 

Response

Avoid breathing vapors or 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. Wipe up residues 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 or vapors. Use only outdoors or in well-

ventilated area.

For frequent or prolonged soldering processes, use of a local exhaust system to avoid exposure to thermal decomposition products. For example, use fume cabinet, a hood on a flexible arm, or tip-mounted fume extraction system on the soldering

iron.

**Handling** Wear eye protection.

Wash hands thoroughly after handling.

**Storage** Not applicable

## **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)
adipic acid	ACGIH <sup>a)</sup> U.S.A. OSHA PEL Canada AB Canada BC Canada ON Canada QC	5 mg/m <sup>3</sup> Not established 5 mg/m <sup>3</sup> 5 mg/m <sup>3</sup> 5 mg/m <sup>3</sup> Not established	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 suppliers' SDS were also consulted. Short term exposure limits (STEL) are for 15 min and long-term permissible exposure limits (PEL) for 8 h.

a) URT irr (Upper Respiratory Track Irritant); CNS impair

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## **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 or dust or flux decomposition fumes can occur.

**RECOMMENDATION:** For frequent or prolonged soldering processes, use of a local exhaust system to avoid exposure to thermal decomposition products. For example, use fume cabinet, a hood on a flexible arm, or tip-mounted fume extraction system on the soldering iron.

## **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** 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 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 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	Vapor Pressure @20°C	Not available
Odor Threshold	Not available	Vapor Density	Not available
pH	Not available	Relative Density @25 °C	1.0
Freezing/Melting	Not	Solubility in	Not
Point	available	Water	available
Initial Boiling	Not	Partition Coefficient n-octanol/water	Not
Point	available		available
Flash Point	Not	Auto-ignition	Not
	available	Temperature	available
Evaporation	Not	Decomposition	Not
Rate	available	Temperature	available
Flammability	Not	Viscosity	Not
	available	@40 °C	available

## Section 10: Stability and Reactivity

Reactivity	Hydrogenated	rosin is	OXIDATION	resistant	however	it may s	:111

contain some residual of unmodified resin acids that can be auto-oxidize in contact with air and sunlight. The resulting oxidation by-

products may cause sensitization.

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

Conditions to

**Avoid** 

Ignition sources, excessive heat, and incompatible substances

**Incompatibilities** Strong oxidizing agents

**Polymerization** Will not occur

**Decomposition** Thermal degradation produces solder flux pyrolysis by-products.

Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5.



## **Section 11: Toxicological Information**

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

**Eyes** Causes redness and serious irritation.

**Skin** Low toxicity: May cause skin redness or mild irritation.

**Inhalation** Low toxicity: Exposure to the flux fumes may cause coughing.

**Ingestion** Low toxicity—abdominal pain, nausea, and vomiting

**Chronic** Not available

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

Chemical Name	LD50	LD50	LC50
	oral	dermal	inhalation
rosin, hydrogenated	>2 000 mg/kg	>2 000 mg/kg	Not
	Rat	Rat	available
adipic acid	5 560 mg/kg	7 940 mL/kg	>7.7 mg/L
	Rat	Rabbit	4 h Rat (mist)
benzotriazole	500 mg/kg	Not	Not
	Rat	available	available
ATE Mixture	3 243 mg/kg	4 580 mg/kg	86 mg/L (mist)

*Note:* Toxicity data from the ECHA database were consulted. The data from supplier SDS were also consulted.

## **Other Toxicological Effects**

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

not met.

**Serious eye damage/irritation** Adipic acid causes eye corrosion. Benzotriazole causes

serious eyes irritation.

Respiratory and skin

sensitization

(allergic reactions)

Based on available data, the classification criteria are

not met.

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**Carcinogenicity** Not classified or listed as a carcinogen by IARC, ACGIH,

(risk of cancer) CA Prop 65, or NTP.

**Mutagenicity** Based on available data, the classification criteria are

(risk of heritable genetic effects) not met.

**Reproductive Toxicity**Based on available data, the classification criteria are

(risk to sex functions) not met.

**Teratogenicity** Based on available data, the classification criteria are

(risk of fetus malformation) 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.

## **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.

Benzotriazole is classified as a category 2 aquatic chronic environmental hazard.

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

#### **Acute Ecotoxicity**

Available toxicity data does not meet classification thresholds.

## **Chronic Ecotoxicity**

Available toxicity data does not meet classification thresholds.

## Biodegradability

Not available

#### Other Effects

Not available



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## **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

## **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)

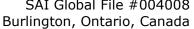
This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, PBDE's, DEHP, BBP, DBP, or DIBP and complies with European RoHS regulations.

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

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

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

**Prepared by the** Regulatory Affairs Department

Date of Creation 02 May 2024 Supersedes 01 March 2023

**Reason for Changes:** Update to classification information.

#### Reference

1) ACGIH 2024 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 (2024).

#### **Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists (USA)
ATE	Acute Toxicity Estimate
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

**Technical Queries** Contact us regarding any questions, improvement suggestions, or

problems with this product. Application notes, instructions, and FAQs

are located at <a href="https://www.mgchemicals.com">www.mgchemicals.com</a>.

Email: <a href="mailto:support@mgchemicals.com">support@mgchemicals.com</a>

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national, and international regulations.