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Revision Number 3

1. IDENTIFICATION

Product identification

Product identifier	Cronatron™ 92 Rosin Core Solder
Other means of identification	CW1815
Recommended use	Solder Alloy
Restrictions on use	For industrial use only

Supplier

Corporate Headquarters:
Cronatron, A Lawson Brand
Lawson Products, Inc.
8770 W.Bryn Mawr Ave.- Suite 900
Chicago, IL 60631
1-866-529-7664

Canadian Distribution Center:
Lawson Canada
7315 Rapistan Court
Mississauga, ON L5N 5Z4
(800) 323-5922

24 Hour Emergency Phone Number (888) 426-4851 (Prosar)

Website <https://www.lawsonproducts.com>

2. HAZARD(S) IDENTIFICATION

Hazard Classification This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), WHMIS 2015 and GHS Regulations.

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation	Category 4
Serious eye damage/eye irritation	Category 2A
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3

Symbol



Signal word DANGER

Hazard statements	H302 - Harmful if swallowed H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation H332 - Harmful if inhaled H335 - May cause respiratory irritation H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
Precautionary statements	
General	P101 - If medical advice is needed, have product container or label at hand P102 - Keep out of reach of children P103 - Read label before use.
Prevention	P261 - Avoid breathing dust/fume/gas/mist/vapors/spray P264 - Wash skin thoroughly after handling P272 - Contaminated work clothing should not be allowed out of the workplace P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing and eye/face protection P285 - In case of inadequate ventilation wear respiratory protection
Response	
Eyes	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/attention
Skin	P302 + P352 - IF ON SKIN: Wash with plenty of soap and water P332 + P313 - If skin irritation occurs: Get medical advice/attention P321 - For Specific treatment see section 4 of this sds P363 - Wash contaminated clothing before reuse
Inhalation	P304 + P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician P312 - Call a POISON CENTER or doctor if you feel unwell
Ingestion	P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell P330 - Rinse mouth
Storage	P405 - Store locked up
Disposal	P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable
Hazard(s) Not Otherwise Classified (HNOC)	Not available.
Physical Hazards Not Otherwise Classified (PHNOC)	Not available.
Unknown acute toxicity	No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Composition Solid, Mixture.

Chemical name	CAS-No	Weight %
Tin	7440-31-5	93-96.5
Silver	7440-22-4	3.5-7
Rosin	8050-09-7	2.5-3

4. FIRST-AID MEASURES

Necessary first-aid measures

Inhalation	Remove to fresh air. Call a physician immediately. Advise of chemical composition (Sec. 3 of this SDS).
Ingestion	Drink plenty of water. Induce vomiting, but only if victim is fully conscious. Call a physician immediately. Advise of chemical composition (Sec. 3 of this SDS).
Skin contact	Wash area thoroughly with soap and water. If skin irritation persists, call a physician.
Eye contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Most important symptoms (acute)	Chemical or hypersensitive pneumonitis, with flu-like symptoms (e.g. fever, chills) has also been reported. Dizziness. Headache. Nausea. Constipation.
Most important symptoms (over-exposure)	Not available.
Indication of any immediate medical attention and special treatment needed	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Carbon dioxide (CO2). Dry chemical.
Unsuitable extinguishing media	Do not use water on molten metal. Large fires may be flooded with water from a safe distance.
Specific hazards	Finely divided dust may form explosive mixture with air.
Special protective equipment for fire-fighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Not applicable.
Methods and materials for containment and cleaning up	Solder is recyclable. Vacuuming is recommended for metal dust from sawing / grinding operations.

7. HANDLING AND STORAGE

Precautions for safe handling

Gloves should be worn when handling to prevent cuts. Wet or moist Ingots WILL present an explosion hazard when submerged in molten solder. Avoid fire/explosion risks. Always preheat ingot before charging into furnace.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, and well-ventilated place. Store at room temperature. Strong acids. Alkalies.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	OSHA PEL (TWA)	ACGIH OEL (TWA)	NIOSH - TWA
Tin	2 mg/m ³ TWA	2 mg/m ³ TWA	2 mg/m ³ TWA 2 mg/m ³ TWA
Silver	0.01 mg/m ³ TWA	0.1 mg/m ³ TWA	0.01 mg/m ³ TWA
Rosin	-	-	0.1 mg/m ³ TWA

Appropriate engineering controls

Local exhaust and general ventilation must be adequate to meet exposure standards.

Individual protection measures, such as personal protective equipment**Eye protection**

Use safety goggles around molten metal. Wear approved safety glasses or welding goggles appropriate to the procedure.

Skin and body protection

Protective gloves are recommended, especially for high temperature applications to prevent burns.

Respiratory protection

Use NIOSH approved breathing apparatus or air supplied respirator when soldering in a confined space or where local exhaust or ventilation does not keep exposure below the TLV's.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands after handling the product. Washing hands, face, neck and arms thoroughly before eating or smoking is recommended. When using, do not eat, drink or smoke.

Canadian Province Occupational Exposure Limits

Chemical name	Alberta OEL	British Columbia OEL	Manitoba OEL	New Brunswick - OEL	Newfoundland and Labrador - OEL	Nova Scotia - OEL	Ontario OEL	Prince Edward Island - OEL	Quebec OEL	Saskatchewan - OEL
Tin	2 mg/m ³ TWA	2 mg/m ³ TWA 2 mg/m ³ TWA	2 mg/m ³ TWA	2 mg/m ³ TWA	2 mg/m ³ TWA 2 mg/m ³ TWA	2 mg/m ³ TWA	2 mg/m ³ TWA 2 mg/m ³ TWA	2 mg/m ³ TWA 2 mg/m ³ TWA	2 mg/m ³ TWA 2 mg/m ³ TWA 2 mg/m ³ TWA	4 mg/m ³ STEL 2 mg/m ³ TWA 2 mg/m ³ TWA
Silver	0.1 mg/m ³ TWA	0.03 mg/m ³ STEL 0.01 mg/m ³ TWA 0.01 mg/m ³ TWA	0.1 mg/m ³ TWA	0.1 mg/m ³ TWA	0.1 mg/m ³ TWA	0.1 mg/m ³ TWA	0.1 mg/m ³ TWA	0.1 mg/m ³ TWA	0.1 mg/m ³ TWA 0.1 mg/m ³ TWA	0.3 mg/m ³ STEL 0.1 mg/m ³ TWA
Rosin	-	-	-	-	-	-	-	-	0.1 mg/m ³ TWA 0.1 mg/m ³ TWA	-

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid
Color	Silver
Odor	Odorless
Odor threshold	Not applicable
pH	Not applicable
Melting point/range °C	221-302
Melting point/range °F	430-475
Boiling point/range °C	Sn@2270 / Ag@2210 °C
Boiling point/range °F	Sn 4120 / Ag 4010
Flash point °C / °F	Not applicable
Evaporation rate	Not applicable
Flammability (Solid, Gas)	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapor pressure	Not applicable
Vapor density	Not applicable
Relative density	7.419
Solubility	insoluble
Partition coefficient (n-octanol/water)	Not applicable
Autoignition temperature °C	Not applicable
Autoignition temperature °F	Not applicable
Decomposition temperature °C	No data available
Decomposition temperature °F	No data available
Viscosity	Not applicable

10. STABILITY AND REACTIVITY

Reactivity	No dangerous reactions under normal conditions of use.
Chemical stability	This material is considered stable.
Possibility of hazardous	Contact with chemical substances like acids or strong bases could cause generation of gas.

reactions**Conditions to avoid** None known.**Incompatible materials** Strong acids. Alkalis.**Hazardous decomposition products** Hazardous polymerization does not occur. Small amounts of turpentine. May emit hydrogen chloride fumes (5% of flux) during soldering.**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure** Dermal. Inhalation. Eyes.**Symptoms** Irritating to skin. irritating to the eyes. Irritating to respiratory system. Symptoms of overexposure may be headache, tiredness, nausea, and vomiting. Dizziness. Constipation.**Delayed and immediate effects as well as chronic effects from short and long-term exposure** Prolonged or excessive exposures may result in argyria, a permanent localized blue-gray discoloration of the eye, skin, or mucous membranes.**Numerical measures of toxicity**

Chemical name	Inhalation LC50:	Dermal LD50:	Oral LD50:
Tin	-	-	= 700 mg/kg (Rat)
Silver	-	> 2000 mg/kg (Rat)	> 5000 mg/kg (Rat)
Rosin	= 1.5 mg/L (Rat) 4 h	> 2500 mg/kg (Rabbit)	= 3 mg/kg (Rat) = 7600 mg/kg (Rat)

ATEmix (dermal) Not available**ATEmix (oral)** Not available**ATEmix (inhalation-gas)** Not available**ATEmix (inhalation-vapor)** Not available**ATEmix (inhalation-dust/mist)** Not available**Carcinogenicity**

Chemical name	ACGIH OEL - Carcinogens	IARC	OSHA RTK Carcinogens	NTP
Tin	-	-	-	-
Silver	-	-	-	-
Rosin	-	-	-	-

Canadian Province carcinogenicity limits

Chemical name	Alberta - Carcinogen	British Columbia - Carcinogen	Manitoba - Carcinogen	New Brunswick - Carcinogen	Nova Scotia - Carcinogen	Quebec - Carcinogen
Tin	-	-	-	-	-	-

Chemical name	Alberta - Carcinogen	British Columbia - Carcinogen	Manitoba - Carcinogen	New Brunswick - Carcinogen	Nova Scotia - Carcinogen	Quebec - Carcinogen
Silver	-	-	-	-	-	-
Rosin	-	-	-	-	-	-

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish
Tin	-	-
Silver	-	0.00155 - 0.00293: 96 h Pimephales promelas mg/L LC50 static 0.064: 96 h Lepomis macrochirus mg/L LC50 static 0.0062: 96 h Oncorhynchus mykiss mg/L LC50 flow-through
Rosin	400: 72 h Desmodesmus subspicatus mg/L EC50	-

Persistence and degradability Not readily biodegradable.

Bioaccumulation No information available

Chemical name	CAS-No	Partition coefficient (log Kow)
Tin 7440-31-5	7440-31-5	-
Silver 7440-22-4	7440-22-4	-
Rosin 8050-09-7	8050-09-7	-

Mobility in soil Not available.

Other adverse effects Welding consumables and materials can degrade into the components used to manufacture the product. Avoid exposure to conditions that could lead to accumulation in soils and groundwater.

13. DISPOSAL CONSIDERATIONS

Disposal information Do not allow material to contaminate ground water system. Dispose of all product, residues and clean-up materials in accordance with local, state, and federal regulations.

Contaminated packaging Recycle if possible.

14. TRANSPORTATION INFORMATION

Shipping Descriptions

DOT Not Regulated

TDG
ID-No Not Regulated

IATA
ID-No Not Regulated

IMDG/IMO

ID-No

Not Regulated

Marine Pollutants

Chemical name	CAS-No	USDOT Marine Pollutant	Canada TDG Marine Pollutant	IMDG Marine Pollutant
Tin	7440-31-5	-	-	-
Silver	7440-22-4	-	-	-
Rosin	8050-09-7	-	-	-

Special Precautions

Multi-modal shipping descriptions are provided for informational purposes and do not consider container size. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

15. REGULATORY INFORMATION

State regulations

U.S. state Right-to-Know regulations

See information below

Chemical name	CAS-No	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK
Tin	7440-31-5	X	X	X
Silver	7440-22-4	X	X	X
Rosin	8050-09-7	-	-	X

California Prop. 65

Chemical name	CAS-No	California Prop. 65
Tin	7440-31-5	-
Silver	7440-22-4	-
Rosin	8050-09-7	-

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. Federal Regulations

US EPA SARA 313

See information below

Chemical name	CAS-No	CERCLA/SARA Hazardous Substances RQ	SARA 313 - Threshold Values
Tin	7440-31-5	-	-
Silver	7440-22-4	1000 lb 454 kg 1 lb 0.454 kg	1.0 %
Rosin	8050-09-7	-	-

**US EPA SARA 311/312
hazardous categorization**

Chemical name	DSL/NDSL	Inventory - United States - Section 8(b) Inventory (TSCA)	U.S. - TSCA (Toxic Substances Control Act) - Section 12(b) - Export Notification
Tin	X	X	-
Silver	X	X	-
Rosin	X	X	-

16. OTHER INFORMATION

NFPA

Health	1
Flammability	0
Instability	0

HMIS

Health	1
Flammability	0
Physical hazards	0
Personal protection	To be determined by customer.

Notice: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA).

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Revision note

Key to abbreviations

ACGIH (American Conference of Governmental Industrial Hygienists)
 ATE (Average Toxicity Estimate)
 DSL/NDSL (Domestic Substance List/Non-Domestic Substance List)
 HMIS (Hazardous Materials Identification System)
 IARC (International Agency for Research on Cancer)
 IATA (International Air Transport Association)
 IMDG/IMO (International Maritime Dangerous Goods/International Maritime Organization)
 NFPA (National Fire Protection Association)
 NTP (National Toxicology Program)
 OEL (Occupational Exposure Level)
 OSHA (Occupational Safety and Health Administration of the US Department of Labor)
 PEL (Permissible Exposure Limit)
 TSCA (Toxic Substance Control Act)
 USEPA (United States Environmental Protection Agency)

Disclaimer

The information accumulated herein is believed to be accurate, but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

End of Safety Data Sheet