

# SAFETY DATA SHEET

Alloy SN100C NC 259



## Section 1. Identification

**GHS product identifier** : Alloy SN100C NC 259  
**Reference number** : GHS003  
**Other means of identification** : Not available.  
**Product type** : Solid. [Solder Paste]

### Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

**Supplier's details** : AIM  
9100 Henri Bourassa East  
Montreal, QC  
H1E 2S4  
(514) 494-2000  
  
In the United States:  
AIM  
25 Kenney Drive  
Cranston, RI 02920  
(800) CALL-AIM  
  
In México  
AIM Soldadura de México  
Circuito Interior Norte # 460  
Parque Industrial Salvarcar  
Ciudad Juárez, Chih.  
(656) 630-0032

**Emergency telephone number (with hours of operation)** : INFOTRAC  
North America: (800) 535-5053  
International: (352) 323-3500

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : SKIN SENSITIZATION - Category 1

### GHS label elements

**Hazard pictograms** :



**Signal word** : Warning

**Hazard statements** : May cause an allergic skin reaction.

### Precautionary statements

**Prevention** : Wear protective gloves. Avoid breathing dust. Contaminated work clothing must not be allowed out of the workplace.

**Response** : Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention.

**Storage** : Not applicable.

## Section 2. Hazards identification

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

**Other means of identification** : Not available.

Ingredient name	%	CAS number
Tin	≥75 - ≤90	7440-31-5
Rosin, hydrogenated	≤3	65997-06-0
Copper	≤1	7440-50-8
Amine Decanoic Acid Salt	≤1	-
Nickel	<0.1	7440-02-0

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- 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 if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

## Section 4. First aid measures

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness
- Ingestion** : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : No specific fire or explosion hazard.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
metal oxide/oxides

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

## Section 6. Accidental release measures

- ## Section 7. Handling and storage

## Section 7. Handling and storage

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
Tin	<p><b>ACGIH TLV (United States, 3/2020).</b> TWA: 2 mg/m<sup>3</sup>, (as Sn) 8 hours. Form: Inhalable fraction <b>NIOSH REL (United States, 10/2016).</b> TWA: 2 mg/m<sup>3</sup> 10 hours. <b>OSHA PEL (United States, 5/2018).</b> TWA: 2 mg/m<sup>3</sup>, (as Sn) 8 hours.</p>
Rosin, hydrogenated Copper	<p>None. <b>ACGIH TLV (United States, 3/2020).</b> TWA: 1 mg/m<sup>3</sup>, (as Cu) 8 hours. Form: Dust and mist TWA: 0.2 mg/m<sup>3</sup> 8 hours. Form: Fume <b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 1 mg/m<sup>3</sup>, (as Cu) 8 hours. Form: Dusts and Mists TWA: 0.1 mg/m<sup>3</sup>, (as Cu) 8 hours. Form: Fume <b>NIOSH REL (United States, 10/2016).</b> TWA: 1 mg/m<sup>3</sup>, (as Cu) 10 hours. Form: Dusts and Mists <b>OSHA PEL (United States, 5/2018).</b> TWA: 1 mg/m<sup>3</sup> 8 hours. Form: Dusts and Mists TWA: 0.1 mg/m<sup>3</sup> 8 hours. Form: Fume</p>

## Section 8. Exposure controls/personal protection

Amine Decanoic Acid Salt  
Nickel

None.  
**OSHA PEL 1989 (United States, 3/1989).**  
 TWA: 1 mg/m<sup>3</sup>, (as Ni) 8 hours.  
**ACGIH TLV (United States, 3/2020).**  
 TWA: 1.5 mg/m<sup>3</sup> 8 hours. Form: Inhalable fraction  
**NIOSH REL (United States, 10/2016).**  
 TWA: 0.015 mg/m<sup>3</sup>, (as Ni) 10 hours.  
**OSHA PEL (United States, 5/2018).**  
 TWA: 1 mg/m<sup>3</sup>, (as Ni) 8 hours.

### Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

#### Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

#### Skin protection

##### Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

##### Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

##### Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

##### Respiratory protection

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### Appearance

#### Physical state

: Solid. [Solder Paste]

#### Color

: Not available.

#### Odor

: Not available.

#### Odor threshold

: Not available.

#### pH

: Not available.

## Section 9. Physical and chemical properties

<b>Melting point</b>	: Not available.
<b>Boiling point</b>	: Not available.
<b>Flash point</b>	: Not applicable.
<b>Evaporation rate</b>	: Not available.
<b>Flammability (solid, gas)</b>	: Not available.
<b>Lower and upper explosive (flammable) limits</b>	: Not applicable.
<b>Vapor pressure</b>	: Not available.
<b>Vapor density</b>	: Not applicable.
<b>Relative density</b>	: Not available.
<b>Solubility</b>	: Not available.
<b>Solubility in water</b>	: Not available.
<b>Partition coefficient: n-octanol/water</b>	: Not applicable.
<b>Auto-ignition temperature</b>	: Not applicable.
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Not applicable.
<b>Flow time (ISO 2431)</b>	: Not available.

## Section 10. Stability and reactivity

<b>Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: The product is stable.
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	: No specific data.
<b>Incompatible materials</b>	: No specific data.
<b>Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Rosin, hydrogenated	LD50 Oral	Guinea pig	5000 mg/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
Nickel	LDLo Oral	Guinea pig	5 mg/kg	-

#### Irritation/Corrosion

Not available.

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

## Section 11. Toxicological information

### Classification

Product/ingredient name	OSHA	IARC	NTP
Rosin, hydrogenated	None.	4	-
Amine Decanoic Acid Salt	None.	4	-
Nickel	-	2B	Reasonably anticipated to be a human carcinogen.

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Rosin, hydrogenated	Category 3	-	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : May cause an allergic skin reaction.  
**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.  
**Inhalation** : No specific data.  
**Skin contact** : Adverse symptoms may include the following:  
                   irritation  
                   redness  
**Ingestion** : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.



## Section 11. Toxicological information

<b>Carcinogenicity</b>	: No known significant effects or critical hazards.
<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Teratogenicity</b>	: No known significant effects or critical hazards.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
<b>Fertility effects</b>	: No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
Oral	291588.79 mg/kg

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Copper	Acute EC50 1100 µg/l Fresh water	Aquatic plants - Lemna minor	4 days
	Acute EC50 1 µg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute EC50 2.1 µg/l Fresh water	Daphnia - Daphnia longispina - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute IC50 13 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
	Acute IC50 5.4 mg/l Marine water	Aquatic plants - Plantae - Exponential growth phase	72 hours
	Chronic NOEC 2.5 µg/l Marine water	Algae - Nitzschia closterium - Exponential growth phase	72 hours
	Chronic NOEC 7 mg/l Fresh water	Aquatic plants - Ceratophyllum demersum	3 days
	Chronic NOEC 0.02 mg/l Fresh water	Crustaceans - Cambarus bartonii - Mature	21 days
	Chronic NOEC 2 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 0.8 µg/l Fresh water	Fish - Oreochromis niloticus - Juvenile (Fledgling, Hatchling, Weanling)	6 weeks
Nickel	Acute EC50 2 ppm Marine water	Algae - Macrocystis pyrifera - Young	4 days
	Acute EC50 450 µg/l Fresh water	Aquatic plants - Lemna minor	4 days
	Acute EC50 1000 µg/l Marine water	Daphnia - Daphnia magna	48 hours
	Acute IC50 0.31 mg/l Marine water	Crustaceans - Americamysis bahia - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 1.3 ppm Fresh water	Fish - Cyprinus carpio - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 100 mg/l Marine water	Algae - Glenodinium halli	72 hours
	Chronic NOEC 3.5 µg/l Fresh water	Fish - Cyprinus carpio	4 weeks

### Persistence and degradability

Not available.

### Bioaccumulative potential



## Section 12. Ecological information

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Rosin, hydrogenated	3.42	-	low

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
<b>UN number</b>	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
<b>UN proper shipping name</b>	-	-	-	-	-	-
<b>Transport hazard class(es)</b>	-	-	-	-	-	-
<b>Packing group</b>	-	-	-	-	-	-
<b>Environmental hazards</b>	No.	No.	No.	No.	No.	No.
<b>Additional information</b>	-	-	-	-	-	-

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to IMO instruments** : Not available.

## Section 15. Regulatory information

**Clean Air Act Section 112** : Listed

**(b) Hazardous Air Pollutants (HAPs)**

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### State regulations

**Massachusetts** : The following components are listed: TIN

**New York** : None of the components are listed.

**New Jersey** : The following components are listed: TIN; bis(2-butoxyethyl) ether

**Pennsylvania** : The following components are listed: TIN; bis(2-butoxyethyl) ether

### California Prop. 65

**WARNING:** This product can expose you to Nickel, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

<b>Ingredient name</b>	<b>Cancer</b>	<b>Reproductive</b>	<b>No significant risk level</b>	<b>Maximum acceptable dosage level</b>
Nickel	Yes.	No.	-	-

### International regulations

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### International lists

#### National inventory

**Australia** : Not determined.

**Canada** : Not determined.

**China** : Not determined.

**Europe** : Not determined.

**Japan** : **Japan inventory (CSCL):** Not determined.  
**Japan inventory (ISHL):** Not determined.

**Malaysia** : Not determined

**New Zealand** : Not determined.

**Philippines** : Not determined.

**Republic of Korea** : Not determined.

**Taiwan** : Not determined.

**Turkey** : Not determined.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

Health	/	2
Flammability		0
Physical hazards		0

### National Fire Protection Association (U.S.A.)



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### Procedure used to derive the classification

Classification	Justification
SKIN SENSITIZATION - Category 1	Calculation method

### History

Date of printing : 3/5/2025

Date of issue/Date of revision : 3/5/2025

Date of previous issue : 2/16/2022

Version : 0.13

### Key to abbreviations

: ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 IATA = International Air Transport Association  
 IBC = Intermediate Bulk Container  
 IMDG = International Maritime Dangerous Goods  
 LogPow = logarithm of the octanol/water partition coefficient  
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
 UN = United Nations

### References

: Not available.

Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.