SAFETY DATA SHEET

ALLOY SAC305

Section 1. Identification

GHS product identifier : ALLOY SAC305

Reference number : Not available.

Other means of identification : Not applicable

Product type : Solid. [Wire/Bar, Massive form]

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 : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Not applicable

Ingredient name	%	CAS number
Tin	≥90	7440-31-5
silver	≤5	7440-22-4
copper	≤1	7440-50-8

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 : Get medical attention if any damage to the eye is caused by the metal.

Inhalation : Not applicable.

Skin contact : Flush contaminated skin with plenty of water. Cuts should be treated promptly and covered.

Ingestion : Not applicable.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Not applicable.

Inhalation : Not applicable.

Skin contact : No known significant effects or critical hazards.

Ingestion : Not applicable.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

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.

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.

Section 5. Fire-fighting measures

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

Hazardous thermal decomposition products : Decomposition products may include the following materials:
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 : No special protection is required.

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. 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 : No specific hazard.

Methods and materials for containment and cleaning up

Small spill : Restack safely. Take care with items that are sharp or heavy.

Large spill : Restack safely. Take care with items that are sharp or heavy. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Take care with items that are sharp or heavy.

Advice on general occupational hygiene : Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Tin	**ACGIH TLV (United States, 1/2023). [Tin and inorganic compounds, excluding Tin hydride and indium tin oxide as Sn]** TWA: 2 mg/m³, (as Sn) 8 hours. Form: Inhalable fraction **NIOSH REL (United States, 10/2020).** TWA: 2 mg/m³ 10 hours. **OSHA PEL (United States, 5/2018). [Tin, inorganic compounds (except oxides) (as Sn)]** TWA: 2 mg/m³, (as Sn) 8 hours. **OSHA PEL 1989 (United States, 3/1989).**

Section 8. Exposure controls/personal protection

	[Tin, inorganic compounds (except oxides) as Sn] TWA: 2 mg/m³, (measured as Sn) 8 hours. Form: Inorganic
silver	**ACGIH TLV (United States, 1/2023).** TWA: 0.1 mg/m³ 8 hours. Form: Dust and fumes **OSHA PEL 1989 (United States, 3/1989). [Silver, metal and soluble compounds (as Ag)]** TWA: 0.01 mg/m³, (as Ag) 8 hours. **NIOSH REL (United States, 10/2020). [silver metal dust and soluble compounds as Ag]** TWA: 0.01 mg/m³, (as Ag) 10 hours. Form: METAL DUST AND SOLUBLE **OSHA PEL (United States, 5/2018). [Silver, metal and soluble compounds (as Ag)]** TWA: 0.01 mg/m³, (as Ag) 8 hours.
copper	**ACGIH TLV (United States, 1/2023). [Copper Dusts and mists, as Cu]** TWA: 1 mg/m³, (as Cu) 8 hours. Form: Dust and mist **OSHA PEL 1989 (United States, 3/1989). [Copper Dust and mists (as Cu)]** TWA: 1 mg/m³, (as Cu) 8 hours. Form: Dusts and Mists **NIOSH REL (United States, 10/2020).** TWA: 1 mg/m³, (as Cu) 10 hours. Form: Dusts and Mists **OSHA PEL (United States, 5/2018).** TWA: 1 mg/m³ 8 hours. Form: Dusts and Mists TWA: 0.1 mg/m³ 8 hours. Form: Fume **ACGIH TLV (United States, 1/2023). [Copper Fume]** TWA: 0.2 mg/m³ 8 hours. Form: Fume **OSHA PEL 1989 (United States, 3/1989). [Copper Fume (as Cu)]** TWA: 0.1 mg/m³, (as Cu) 8 hours. Form: Fume

Appropriate engineering controls : No special ventilation requirements.

Environmental exposure controls : Not applicable.

Individual protection measures

Hygiene measures : Wash thoroughly after handling.

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 : Use strong, cut-resistant gloves suitable for handling metals.

Section 8. Exposure controls/personal protection

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 : Not applicable.

Section 9. Physical and chemical properties

Appearance

Physical state : Solid. [Wire/Bar, Massive form]

Color : Silver-gray

Odor : Not available.

Odor threshold : Not available.

pH : Not available.

Melting point : 217 to 218°C (422.6 to 424.4°F)

Boiling point : Not available.

Flash point : Not applicable.

Evaporation rate : Not available.

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Not applicable.

Vapor pressure : Not available.

Vapor density : Not applicable.

Relative density : Not available.

Solubility : Not available.

Solubility in water : Not available.

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : Not applicable.

Decomposition temperature : Not available.

Viscosity : Not applicable.

Flow time (ISO 2431) : Not available.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

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 : Not applicable.

Inhalation : Not applicable.

Skin contact : No known significant effects or critical hazards.

Ingestion : Not applicable.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

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

Section 11. Toxicological information

Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
silver	Acute EC50 1.4 µg/l Marine water	Algae - Chroomonas sp.	4 days
	Acute EC50 0.24 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 11 µg/l Fresh water	Crustaceans - Ceriodaphnia reticulata	48 hours
	Acute LC50 2.13 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 5 mg/l Marine water	Algae - Glenodinium halli	72 hours
copper	Acute EC50 1100 µg/l Fresh water	Aquatic plants - Lemna minor	4 days
	Acute EC50 2.1 µg/l Fresh water	Daphnia - Daphnia longispina - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute IC50 16 µg/l Fresh water	Algae - Chlorella pyrenoidosa - Exponential growth phase	72 hours
	Acute IC50 5.4 mg/l Marine water	Aquatic plants - Plantae - Exponential growth phase	72 hours
	Acute LC50 0.072 µg/l Marine water	Crustaceans - Amphipoda - Adult	48 hours
	Acute LC50 7.56 µg/l Marine water	Fish - Periophthalmus waltoni - Adult	96 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

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
silver	-	70	low

Mobility in soil

Section 12. Ecological information

Soil/water partition coefficient (K_{OC}) : 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. Empty containers or liners may retain some product residues.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-	-
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.
Additional information	**Reportable quantity** 33333.3 lbs / 15133.3 kg. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.	-	-	-	-	-

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 (b) Hazardous Air Pollutants (HAPs) : Not listed

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; SILVER

New York : The following components are listed: Silver

New Jersey : The following components are listed: TIN; SILVER

Pennsylvania : The following components are listed: TIN; SILVER COMPOUNDS

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

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 : All components are listed or exempted.

Canada : All components are listed or exempted.

China : All components are listed or exempted.

Europe :

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

Malaysia : Not determined

New Zealand : All components are listed or exempted.

Philippines : All components are listed or exempted.

Republic of Korea : All components are listed or exempted.

Taiwan : All components are listed or exempted.

Turkey : All components are listed or exempted.

Section 16. Other information

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

Health	/	0
Flammability		0
Physical hazards		0

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

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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
Not classified.	

History

Date of printing : 3/31/2025

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Date of previous issue : 3/20/2025

Version : 2.01

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

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