SAFETY DATA SHEET

ALLOY SN100C GLOWCORE

Section 1. Identification : ALLOY SN100C GLOWCORE **GHS** product identifier **Reference number** : N/A Other means of : Not applicable identification **Product type** : Solid. [Cored Wire] 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 : INFOTRAC **Emergency telephone** number (with hours of North America: (800) 535-5053 operation) 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. : Not classified. **Classification of the** substance or mixture

<u>GHS label elements</u>	
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.

1/12

Section 3. Composition/information on ingredients

Substance/mixture Other means of identification

- : Mixture
- : Not applicable

Ingredient name	%	CAS number
Tin	≥90	7440-31-5
Rosin, hydrogenated	≤3	65997-06-0
copper	≤1	7440-50-8
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. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	 Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health	<u>n effects</u>
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
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.

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: 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, protect	tive 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. 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 co	ontainment and cleaning up		
Small spill	: Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.		
Large spill	: Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.		

Section 7. Handling and storage

Precautions for safe handlin	ıg					
Protective measures	: Put on ap	propriate personal protecti	ve equipment (see Se	ection 8).		
Advice on general occupational hygiene	handled, s drinking a	nking and smoking should stored and processed. Wo nd smoking. Remove cor ating areas. See also Sec	orkers should wash ha taminated clothing an	ands and face d protective e	before eat quipment l	0,
Conditions for safe storage, including any incompatibilities	direct sun (see Secti ready for u upright to	ccordance with local regul light in a dry, cool and wel on 10) and food and drink use. Containers that have prevent leakage. Do not s ent to avoid environmental	l-ventilated area, awa . Keep container tigh been opened must b store in unlabeled con	y from incomp tly closed and e carefully res	atible mate sealed un ealed and	erials til kept
Date of issue/Date of revision	: 2/1/2018	Date of previous issue	: 12/18/2017	Version	:0.04	3/12

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Tin	OSHA (United States, 0/1997). Notes: Respirable TWA: 2 mg/m ³ NIOSH (United States, 0/1994). Notes: Respirable TWA: 2 mg/m ³ STEL: 4 mg/m ³ ACGIH TLV (United States, 3/2016). TWA: 2 mg/m ³ , (as Sn) 8 hours. NIOSH REL (United States, 10/2013). TWA: 2 mg/m ³ , (as Sn) 10 hours.
Rosin, hydrogenated copper	 None. ACGIH TLV (United States, 3/2016). TWA: 1 mg/m³, (as Cu) 8 hours. Form: Dust and mist TWA: 0.2 mg/m³ 8 hours. Form: Fume OSHA PEL 1989 (United States, 3/1989). TWA: 1 mg/m³, (as Cu) 8 hours. Form: Dusts and Mists TWA: 0.1 mg/m³, (as Cu) 8 hours. Form: Fume NIOSH REL (United States, 10/2013). TWA: 1 mg/m³, (as Cu) 10 hours. Form: Dusts and Mists OSHA PEL (United States, 2/2013). TWA: 1 mg/m³ 8 hours. Form: Dusts and Mists TWA: 0.1 mg/m³ 8 hours. Form: Fume NIOSH (United States, 0/1994). TWA: 1 mg/m³ OSHA (United States, 0/1989).
Nickel	TWA: 0.1 mg/m ³ ACGIH TLV (United States, 3/2016). TWA: 1.5 mg/m ³ 8 hours. Form: Inhalable fraction OSHA PEL 1989 (United States, 3/1989). TWA: 1 mg/m ³ , (as Ni) 8 hours. NIOSH REL (United States, 10/2013). TWA: 0.015 mg/m ³ , (as Ni) 10 hours. OSHA PEL (United States, 2/2013). TWA: 1 mg/m ³ , (as Ni) 8 hours.

Appropriate engineering controls	0	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.				ie
Environmental exposure controls	they comp cases, fum	from ventilation or work p ly with the requirements o le scrubbers, filters or eng essary to reduce emissior	f environmental prote ineering modification	ction legislations to the proce	on. In som	е
Individual protection meas	<u>ures</u>					
Hygiene measures	eating, sm Appropriat Wash cont	ds, forearms and face tho oking and using the lavato e techniques should be us aminated clothing before re close to the workstation	ory and at the end of the end of the sed to remove potention reusing. Ensure that	he working pe ally contamina	eriod. ated clothir	ıg.
Date of issue/Date of revision	: 2/1/2018	Date of previous issue	: 12/18/2017	Version	:0.04	4/12

Date of issue/Date of revision	: 2/1/2018	Date of previous issue	: 12/18/2017	Version : 0.04
--------------------------------	------------	------------------------	--------------	----------------

Section 8. Exposure controls/personal protection

•	· · ·
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.
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. [Cored Wire]
Color	:	Not available.
Odor	:	Odorless.
Odor threshold	:	Not available.
рН	:	Not available.
Melting point	:	Not available.
Boiling point	:	Not available.
Flash point	:	Not available.
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not available.
Lower and upper explosive (flammable) limits	:	Not available.
Vapor pressure	:	Not available.
Vapor density	:	Not available.
Relative density	:	Not available.
Solubility	:	Not available.
Solubility in water	:	Not available.
Partition coefficient: n- octanol/water	:	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
Viscosity	:	Not available.
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

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

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

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

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 : Not available. routes of exposure

Section 11. Toxicological information

		gioa monation
Potential acute health effects	<u>s</u>	
Eye contact	:	No known significant effects or critical hazards.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	No known significant effects or critical hazards.
Ingestion	:	No known significant effects or critical hazards.
Symptoms related to the phy	<u>/sic</u>	al, chemical and toxicological characteristics
Eye contact	1	No specific data.
Inhalation	1	No specific data.
Skin contact	:	No specific data.
Ingestion	:	No specific data.
Delayed and immediate effect	cts	and also chronic effects from short and long term exposure
<u>Short term exposure</u>		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
Long term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
Potential chronic health eff	ect	<u>S</u>
Not available.		
General	:	No known significant effects or critical hazards.
Carcinogenicity	1	No known significant effects or critical hazards.
Mutagenicity	1	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

Result	Species	Exposure
Acute EC50 1100 µg/l Fresh water Acute EC50 2.1 µg/l Fresh water	Aquatic plants - Lemna minor Daphnia - Daphnia longispina - Juvenile (Fledgling, Hatchling, Weanling)	4 days 48 hours
Acute IC50 13 μg/l Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
Acute IC50 5.4 mg/I Marine water	Aquatic plants - Plantae - Exponential growth phase	72 hours
Acute LC50 0.072 μg/l Marine water Acute LC50 7.56 μg/l Marine water	Crustaceans - Amphipoda - Adult Fish - Periophthalmus waltoni - Adult	48 hours 96 hours
	Acute EC50 1100 µg/l Fresh water Acute EC50 2.1 µg/l Fresh water Acute IC50 13 µg/l Fresh water Acute IC50 5.4 mg/l Marine water Acute LC50 0.072 µg/l Marine water	Acute EC50 1100 µg/l Fresh waterAquatic plants - Lemna minorAcute EC50 2.1 µg/l Fresh waterAquatic plants - Lemna minorAcute IC50 13 µg/l Fresh waterJuvenile (Fledgling, Hatchling, Weanling)Acute IC50 13 µg/l Fresh waterAlgae - Pseudokirchneriella subcapitata - Exponential growth phaseAcute IC50 5.4 mg/l Marine waterAquatic plants - Plantae - Exponential growth phaseAcute LC50 0.072 µg/l Marine waterCrustaceans - Amphipoda - Adult Fish - Periophthalmus waltoni -

Section 12. Ecological information

	0		
	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 47.5 ng/L Fresh water	Fish - Heteropneustes fossilis	96 hours
	Chronic NOEC 100 mg/l Marine water Chronic NOEC 3.5 µg/l Fresh water	Algae - Glenodinium halli Fish - Cyprinus carpio	72 hours 4 weeks

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Rosin, hydrogenated	3.42	-	low

Mobility in soil

Soil/water partition : Not available. coefficient (Koc)

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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and
	sewers.

Section 14. Transport information

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	-	-	-	-	-	-

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 : Not available. to Annex II of MARPOL and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations	: United States inventory (TSCA 8b): All components are listed or exempted.
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: 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
SARA 302/304	
Composition/information	on ingredients
No products were found.	
SARA 304 RQ	: Not applicable.
SARA 311/312	
Classification	: Not applicable.
Composition/information	on ingredients

Section 15. Regulatory information

Name	%	hazard	Sudden release of pressure		(acute)	Delayed (chronic) health hazard
Nickel	<0.1	No.	No.	No.	No.	Yes.

State regulations Massachusetts

: The following components are listed: TIN

New York

: None of the components are listed.

New Jersey Pennsylvania The following components are listed: TINThe following components are listed: TIN

California Prop. 65

WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	•		Maximum acceptable dosage level
Nickel	Yes.	No.	No.	No.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

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	:	All components are listed or exempted.
China	:	All components are listed or exempted.
Europe	:	Not determined.
Japan	:	Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.
Malaysia	:	Not determined.
New Zealand	:	Not determined.
Philippines	:	Not determined.
Republic of Korea	:	All components are listed or exempted.
Taiwan	1	All components are listed or exempted.
Turkey	;	Not determined.

Section 16. Other information

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



Caution: 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). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

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.

	Classification	Justification		
Not classified.				
History				
Date of printing	: 2/1/2018			
Date of issue/Date of revision	: 2/1/2018			
Date of previous issue	: 12/18/2017			
Version	: 0.04			
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification IATA = International Air Transport Association IBC = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coe MARPOL = International Convention for the Preventi as modified by the Protocol of 1978. ("Marpol" = mar UN = United Nations	tor System of Classification and Labelling of Chemicals sport Association tainer he Dangerous Goods ctanol/water partition coefficient hvention for the Prevention of Pollution From Ships, 1973		
References	: Not available.			
Indicates information the	at has changed from previously issued version.			

Procedure used to derive the classification

Notice to reader

11/12

Section 16. Other information

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.