# **SAFETY DATA SHEET**

Alloy SAC305 V9



# SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier	
Product name	: Alloy SAC305 V9
UFI	: 773K-X0PJ-200M-6ENT
Product code	: GHS049
Product description	: Not available.
Product type	: Solid.
Other means of identification	: Not available.

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

**Identified uses** Not applicable.

Uses advised against Not applicable.

## 1.3 Details of the supplier of the safety data sheet

AIM 9100 Henri Bourassa East Montreal, QC H1E 2S4 (514) 494-2000

AlM Solder Europe Sp. z.o.o. ul. Papiernicza 7 Łódź 92-312 Poland

e-mail address of person : Safetydata@aimsolder.com responsible for this SDS

## 1.4 Emergency telephone number

Telephone number

: INFOTRAC Europe: 0800-181-29-24 International: (352) 323-3500

# **SECTION 2: Hazards identification**

# 2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS] Aquatic Acute 1, H400 Aquatic Chronic 1, H410

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

## 2.2 Label elements

# Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878 - Poland

Alloy SAC305 V9

# **SECTION 2: Hazards identification**

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Hazard	pictor	arams
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Signal word	:	Warning
Hazard statements	:	Very toxic to aquatic life with long lasting effects.
Precautionary statements		
Prevention	:	Avoid release to the environment.
Response	:	Collect spillage.
Storage	:	Not applicable.
Disposal	1	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applicable.
2.3 Other hazards		
Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	:	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do	:	None known.

Other hazards which do not result in classification

# **SECTION 3: Composition/information on ingredients**

3.2 Mixtures	: Mixture				
Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
Tin	REACH #: 01-2119486474-28 EC: 231-141-8 CAS: 7440-31-5	≥75 - ≤90	Not classified.	-	[2]
silver	REACH #: 01-2119555669-21 EC: 231-131-3 CAS: 7440-22-4	≤3	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1000 M [Chronic] = 1000	[1] [2]
Copper	REACH #: 01-2119480154-42 EC: 231-159-6 CAS: 7440-50-8	≤1	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 10000 M [Chronic] = 100	[1] [2]
2-(2-butoxyethoxy)ethanol	EC: 203-961-6 CAS: 112-34-5 Index: 603-096-00-8	≤0.1	Eye Irrit. 2, H319	-	[1] [2]
			See Section 16 for the full text of the H statements declared above.		

# Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878 - Poland

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# **SECTION 3: Composition/information on ingredients**

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, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

<u>Type</u>

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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

# **SECTION 4: First aid measures**

4.1 Description of first aid r	neasures
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	<ul> <li>Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.</li> </ul>
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.
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.

## 4.2 Most important symptoms and effects, both acute and delayed

SECTION 5: Firefig	inting measures
Specific treatments	: No specific treatment.
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
4.3 Indication of any imme	diate medical attention and special treatment needed
Ingestion	: No specific data.
Skin contact	: No specific data.
Inhalation	: No specific data.
Eye contact	: No specific data.

media			

: None known.

Unsuitable extinguishing

media

# **SECTION 5: Firefighting measures**

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5.2 Special hazards arising fr	om the substance or mixture
Hazards from the substance or mixture	<ul> <li>This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.</li> </ul>
Hazardous combustion products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides
5.3 Advice for firefighters	
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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
SECTION 6: Acciden	tal release measures

6.1 Personal precautions, pro	tective 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".
6.2 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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.
6.3 Methods and materials fo	containment 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. Approach release from upwind. 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.
6.4 Reference to other sections	: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information

# **SECTION 7: Handling and storage**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

# 7.1 Precautions for safe handling

# **SECTION 7: Handling and storage**

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. 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.

## 7.2 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.

#### Seveso Directive - Reporting thresholds

#### Danger criteria

	Notification and MAPP threshold	Safety report threshold
E1	100 tonne	200 tonne

#### 7.3 Specific end use(s)

Recommendations	: Not available.
Industrial sector specific solutions	: Not available.

# **SECTION 8: Exposure controls/personal protection**

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

## 8.1 Control parameters

#### **Occupational exposure limits**

Product/ingredient name Exposure limit values			
TinRegulation of the Minister of Family, Labor and S 18 February 2021, regarding the highest permiss concentrations and values of agents harmful to work environment (Journal of Laws 2021, item 3 2/2021). [tin and inorganic compounds, except S fraction, as Sn] TWA: 2 mg/m³, (calculated as Sn) 8 hours. Form:			
silver	fraction Regulation of the Minister of Family, Labor and Social Policy of 18 February 2021, regarding the highest permissible concentrations and values of agents harmful to health in the work environment (Journal of Laws 2021, item 325) (Poland, 2/2021).		
Copper	TWA: 0.05 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction Regulation of the Minister of Family, Labor and Social Policy of 18 February 2021, regarding the highest permissible concentrations and values of agents harmful to health in the work environment (Journal of Laws 2021, item 325) (Poland, 2/2021). [copper and its inorganic compounds as Cu] TWA: 0.2 mg/m <sup>3</sup> , (calculated as Cu) 8 hours.		
2-(2-butoxyethoxy)ethanol	Regulation of the Minister of Family, Labor and Social Policy of		
Date of issue/Date of revision : 5/17/2024	Date of previous issue         : 12/11/2023         Version         : 1.02         5/14		

# **SECTION 8: Exposure controls/personal protection**

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	18 February 2021, regarding the highest permissible concentrations and values of agents harmful to health in the work environment (Journal of Laws 2021, item 325) (Poland, 2/2021). TWA: 67 mg/m <sup>3</sup> 8 hours.
	STEL: 100 mg/m <sup>3</sup> 15 minutes.
	-

Recommended monitoring procedures If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

## **DNELs/DMELs**

DNEL	Short term	3.476 mg/	General	Systemic
	Inhalation	m³	population	
DNEL	Long term	3.476 mg/	General	Systemic
	Inhalation	m³	population	
DNEL	Short term	11.75 mg/	Workers	Systemic
	Inhalation	m³		
DNEL	Long term	11.75 mg/	Workers	Systemic
	Inhalation	m³		
DNEL	Short term Oral	80 mg/kg	General	Systemic
		bw/day	population	
DNEL	Long term Oral	80 mg/kg	General	Systemic
		bw/day	population	
DNEL	Short term Dermal	80 mg/kg	General	Systemic
		bw/day	population	
DNEL	Long term Dermal	80 mg/kg	General	Systemic
		bw/day	population	
DNEL	Short term Dermal	133.3 mg/	Workers	Systemic
		kg bw/day		
DNEL	Long term Dermal	133.3 mg/	Workers	Systemic
DNEL	Long term	0.04 mg/m <sup>3</sup>	General	Systemic
	Inhalation	_	population	-
DNEL	Long term	0.1 mg/m <sup>3</sup>	Workers	Systemic
	Inhalation	-		
DNEL	Long term Oral	1.2 mg/kg	General	Systemic
		bw/day	population	-
DNEL	Short term	1 mg/m <sup>3</sup>	General	Local
	Inhalation		population	
DNEL	Long term	1 mg/m³	General	Local
	Inhalation		population	
DNEL	Short term	20 mg/m³	General	Systemic
	Inhalation		population	
DNEL	Short term	20 mg/m³	Workers	Systemic
	Inhalation	_		
DNEL	Long term Dermal	137 mg/kg	General	Systemic
	_	bw/day	population	
DNEL	Long term Dermal	137 mg/kg	Workers	Systemic
		bw/day		
DNEL	Short term Dermal	273 mg/kg	General	Systemic
		bw/day	population	-
	DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL	DNELInhalation Long term InhalationDNELShort term InhalationDNELLong term InhalationDNELLong term OralDNELShort term OralDNELShort term DermalDNELShort term DermalDNELShort term DermalDNELShort term DermalDNELLong term DermalDNELLong term DermalDNELLong term OralDNELLong term OralDNELLong term OralDNELLong term Inhalation InhalationDNELShort term InhalationDNELShort term InhalationDNELShort term InhalationDNELShort term InhalationDNELLong term InhalationDNELLong term InhalationDNELShort term InhalationDNELShort term InhalationDNELShort term InhalationDNELShort term InhalationDNELShort term InhalationDNELShort term InhalationDNELShort term InhalationDNELLong term DermalDNELLong term Dermal	Inhalationm³ 3.476 mg/ m³DNELLong term Inhalation3.476 mg/ m³DNELShort term11.75 mg/ InhalationDNELLong term Inhalation11.75 mg/ m³DNELLong term Oral80 mg/kg bw/dayDNELShort term Oral80 mg/kg bw/dayDNELLong term Oral80 mg/kg bw/dayDNELLong term Dermal80 mg/kg bw/dayDNELLong term Dermal80 mg/kg bw/dayDNELLong term Dermal80 mg/kg bw/dayDNELLong term Dermal133.3 mg/ kg bw/dayDNELLong term Dermal133.3 mg/ kg bw/dayDNELLong term Dermal133.3 mg/ kg bw/dayDNELLong term Oral1.2 mg/kg bw/dayDNELLong term Oral1.2 mg/kg bw/dayDNELLong term Oral1.2 mg/kg bw/dayDNELLong term Oral1.2 mg/kg bw/dayDNELLong term Oral1.2 mg/kg bw/dayDNELShort term1 mg/m³ InhalationDNELShort term20 mg/m³ InhalationDNELShort term20 mg/m³ InhalationDNELLong term Dermal137 mg/kg bw/dayDNELLong term Dermal137 mg/kg bw/dayDNELLong term Dermal137 mg/kg bw/dayDNELLong term Dermal137 mg/kg bw/day	Inhalationm³ 3.476 mg/ m³populationDNELLong term3.476 mg/ m³General populationDNELShort term11.75 mg/ m³WorkersDNELLong term11.75 mg/ m³WorkersDNELShort term Oral80 mg/kg bw/dayGeneral populationDNELShort term Oral80 mg/kg bw/dayGeneral populationDNELLong term Oral80 mg/kg bw/dayGeneral populationDNELShort term Dermal80 mg/kg bw/dayGeneral populationDNELShort term Dermal80 mg/kg bw/dayGeneral populationDNELLong term Dermal80 mg/kg bw/dayGeneral populationDNELLong term Dermal133.3 mg/ kg bw/dayWorkersDNELLong term Dermal133.3 mg/ kg bw/dayWorkersDNELLong term Oral1.2 mg/kg populationGeneral populationDNELLong term Oral1.2 mg/kg populationGeneral populationDNELLong term Oral1.2 mg/kg populationGeneral populationDNELShort term1 mg/m³General populationDNELShort term20 mg/m³General populationDNELLong term137 mg/kg bw/dayGeneral populationDNELLong term Dermal137 mg/kg bw/dayGeneral populationDNELLong term Dermal137 mg/kg bw/dayGeneral populationDNELLong term Dermal137 mg/kg <br< td=""></br<>

# **SECTION 8: Exposure controls/personal protection**

	DNEL	Short term Dermal	273 mg/kg bw/day	Workers	Systemic
2-(2-butoxyethoxy)ethanol	DNEL	Long term Oral	5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	40.5 mg/m <sup>3</sup>		Local
	DNEL	Long term Inhalation	40.5 mg/m³		Systemic
	DNEL	Long term Dermal	50 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	60.7 mg/m³		Local
	DNEL	Long term Inhalation	67.5 mg/m³		Local
	DNEL	Long term Inhalation	67.5 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	101.2 mg/ m <sup>3</sup>	Workers	Local

# **PNECs**

No PNECs available.

8.2 Exposure controls Appropriate engineering controls Individual protection meas	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
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. 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	<ul> <li>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.</li> </ul>
Other skin protection	<ul> <li>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.</li> </ul>
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.

# Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878 - Poland

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# **SECTION 8: Exposure controls/personal protection**

Environmental exposure	: Emissions from ventilation or work process equipment should be checked to ensure
controls	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.

# **SECTION 9: Physical and chemical properties**

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

#### 9.1 Information on basic physical and chemical properties

Appearance	
Physical state	: Solid. [Solder Paste]
Color	: Gray. [Dark]
Odor	: Not available.
Odor threshold	: Not available.
Melting point/freezing point	: Not available.
Initial boiling point and boiling range	: Not available.
Flammability	: Not available.
Lower and upper explosion limit	: Not applicable.
Flash point	: Not applicable.
Auto-ignition temperature	: Not applicable.
Decomposition temperature	: Not available.
рН	Not available.
Viscosity	: Not applicable.
Solubility(ies)	:
Not available.	
Solubility in water	: Not available.
Partition coefficient: n-octanol/ water	: Not applicable.
Vapor pressure	: Not available.
Relative density	: Not available.
Vapor density	: Not applicable.
Explosive properties	: Non-explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks and mechanical impacts.
Oxidizing properties	: Not available.
Particle characteristics	
Median particle size	: Not available.

# **SECTION 10: Stability and reactivity**

10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: The product is stable.
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: No specific data.

# **SECTION 10: Stability and reactivity**

**10.5 Incompatible materials** : No specific data.

10.6 Hazardous decomposition products

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

# **SECTION 11: Toxicological information**

# 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

## Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-(2-butoxyethoxy)ethanol	LD50 Dermal LD50 Oral		2700 mg/kg 4500 mg/kg	-
Conclusion/Summon	Not available			

**Conclusion/Summary** : Not available.

# Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
2-(2-butoxyethoxy)ethanol	4500	2700	N/A	N/A	N/A

#### Irritation/Corrosion

Product/ingredient name	Result	Specie	s Score	Exposure	Observa	tion
2-(2-butoxyethoxy)ethanol	Eyes - Moderate irritan	t Rabbit	-	24 hours 20	-	
	Even Severe irritent	Rabbit		mg		
	Eyes - Severe irritant	Raddii	-	20 mg	-	
Conclusion/Summary	: Not available.					
Sensitization						
Conclusion/Summary	: Not available.					
<u>Mutagenicity</u>						
Conclusion/Summary	: Not available.					
Carcinogenicity						
Conclusion/Summary	: Not available.					
Reproductive toxicity						
Conclusion/Summary	: Not available.					
<u>Teratogenicity</u>						
Conclusion/Summary	: Not available.					
Specific target organ toxicit	<u>y (single exposure)</u>					
Not available.						
Specific target organ toxicit	y (repeated exposure)					
Not available.						
Aspiration hazard						
Not available.						
nformation on the likely	: Not available.					
outes of exposure						
Potential acute health effects						
Eye contact	: No known significant	t effects or critical ha	zards.			
Inhalation	: No known significant	t effects or critical ha	zards.			
Skin contact	: No known significant	t effects or critical ha	zards.			
Ingestion	: No known significant					
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# **SECTION 11: Toxicological information**

# 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

<u>Short term exposure</u>		
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 effe	<u>ets</u>	
Not available.		
Conclusion/Summary	: Not available.	
General	: No known significant effects or	critical
Carcinogenicity	: No known significant effects or	critical

# Mutagenicity: No known significant effects or critical hazards.Reproductive toxicity: No known significant effects or critical hazards.

## **11.2 Information on other hazards**

## 11.2.1 Endocrine disrupting properties

Not available.

## 11.2.2 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.

hazards. hazards.

# **SECTION 12: Ecological information**

# 12.1 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/I Marine water	Algae - Glenodinium halli	72 hours
copper flakes (coated with aliphatic acid)	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	72 hours
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# **SECTION 12: Ecological information**

		subcapitata - Exponential growth phase	
	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
2-(2-butoxyethoxy)ethanol	Acute LC50 1300000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
Conclusion/Summary	: Not available.		

# 12.2 Persistence and degradability

**Conclusion/Summary** : Not available.

## 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Silver	-	70	low
2-(2-butoxyethoxy)ethanol	1	-	low

12.4 Mobility in soil	
Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.

## 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

#### 12.6 Endocrine disrupting properties

Not available.

#### 12.7 Other adverse effects

No known significant effects or critical hazards.

# **SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment meth <u>Product</u>	ods			
Methods of disposal	Disposal of with the req any regiona products via	uirements of environmen l local authority requirem a a licensed waste dispos o the sewer unless fully c	nd any by-products sh Ital protection and wa Ients. Dispose of sur Ial contractor. Waste	ould at all times comply ste disposal legislation and
Hazardous waste	: The classified	cation of the product may	/ meet the criteria for	a hazardous waste.
Packaging				
Date of issue/Date of revision	: 5/17/2024	Date of previous issue	: 12/11/2023	Version : 1.02 11/14

# **SECTION 13: Disposal considerations**

Methods of disposal	: The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
Special precautions	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**

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

14.6 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.

14.7 Maritime transport in : Not available. bulk according to IMO instruments

# **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU Regulation (EC) No. 1907/2006 (REACH)</u>

Annex XIV - List of substances subject to authorization

## Annex XIV

None of the components are listed.

## Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions: Not applicable.on the manufacture,<br/>placing on the market and<br/>use of certain dangerous<br/>substances, mixtures and<br/>articles: Not applicable.Other EU regulations<br/>Industrial emissions: Listed

(integrated pollution prevention and control) -Air

# **SECTION 15: Regulatory information**

SECTION 15: Regula	tory information
Industrial emissions (integrated pollution prevention and control) - Water	: Listed
Ozone depleting substance Not listed.	e <u>s (1005/2009/EU)</u>
Prior Informed Consent (Ple Not listed.	<u>C) (649/2012/EU)</u>
Persistent Organic Pollutar Not listed.	<u>nts</u>
Seveso Directive This product is controlled uno Danger criteria	der the Seveso Directive.
Category	
E1	
International regulations Chemical Weapon Convention Not listed.	on List Schedules I, II & III Chemicals
Montreal Protocol Not listed.	
Stockholm Convention on P Not listed.	ersistent Organic Pollutants
Rotterdam Convention on Provide Not listed.	rior Informed Consent (PIC)
UNECE Aarhus Protocol on Not listed.	POPs and Heavy Metals
Inventory list	
Australia	: Not determined.
Canada	: Not determined.
China	: Not determined.
Eurasian Economic Union	: Russian Federation inventory: Not determined.
Japan	: Japan inventory (CSCL): Not determined. Japan inventory (ISHL): Not determined.
New Zealand	: Not determined.
Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: Not determined.
Thailand	: Not determined.
Turkey	: Not determined.
United States	: Not determined.
Viet Nam	: Not determined.
15.2 Chemical Safety	<ul> <li>This product contains substances for which Chemical S</li> </ul>

15.2 Chemical Safety: This pAssessmentrequir

: This product contains substances for which Chemical Safety Assessments are still required.

# **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

Abbreviations and acronyms	: ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement N/A = Not available PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number SGG = Segregation Group
	vPvB = Very Persistent and Very Bioaccumulative

## Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method

#### Full text of abbreviated H statements

H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

#### Full text of classifications [CLP/GHS]

Aquatic Acute 1 Aquatic Chronic 1 Eye Irrit. 2	AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
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#### 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.