

Apollo Scientific

Part Number: **OR4477** Version No: **1.1** Safety Data Sheet (Conforms to Annex II of REACH (1907/2006) - Regulation 2020/878) Chemwatch Hazard Alert Code: 3

Issue Date: **16/05/2022** Print Date: **01/08/2023** S.REACH.GBR.EN

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

1.1. Product Identifier

Product name	S-Amino-5-bromopyridine-3-sulphonic acid	
Chemical Name	2-Amino-3-bromopyridine-5-sulfonic acid	
Synonyms	t Available	
Proper shipping name	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.	
Chemical formula	Not Available	
Other means of identification	Not Available	
CAS number	247582-62-3*	

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

Relevant identified uses	Not Available	
Uses advised against No specific uses advised against are identified.		

1.3. Details of the manufacturer or supplier of the safety data sheet

Registered company name	Apollo Scientific		
Address	hitefield Road, Bredbury SK62QR United Kingdom		
Telephone	01614060505		
Fax	0161 406 0506		
Website	http://www.apolloscientific.co.uk/		
Email	sales@apolloscientific.co.uk		

1.4. Emergency telephone number

Association / Organisation	Not Available
Emergency telephone numbers	Not Available
Other emergency telephone numbers	Not Available

SECTION 2 Hazards identification

2.1. Classification of the substance or mixture

Classification according to regulation (EC) No 1272/2008 [CLP] and amendments ^[1]

H314 - Skin Corrosion/Irritation Category 1B, H290 - Corrosive to Metals Category 1, H318 - Serious Eye Damage/Eye Irritation Category 1

Legend: 1. Classified by Chemwatch; 2. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

2.2. Label elements

Hazard pictogram(s)	
Signal word	Danger

Hazard statement(s)

H314	Causes severe skin burns and eye damage.
H290	May be corrosive to metals.

Supplementary statement(s)

Not Applicable

Precautionary statement(s) Prevention

P260	Do not breathe dust/fume.	
P264 Wash all exposed external body areas thoroughly after handling.		
P280 Wear protective gloves, protective clothing, eye protection and face protection.		
P234 Keep only in original packaging.		

Precautionary statement(s) Response

P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.		
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].		
P305+P351+P338	IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.		
P310	Immediately call a POISON CENTER/doctor/physician/first aider.		
P363	Wash contaminated clothing before reuse.		
P390	P390 Absorb spillage to prevent material damage.		
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.		

Precautionary statement(s) Storage

P405 Store locked up.

Precautionary statement(s) Disposal

P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.
------	--

2.3. Other hazards

REACH - Art.57-59: The mixture does not contain Substances of Very High Concern (SVHC) at the SDS print date.

SECTION 3 Composition / information on ingredients

3.1.Substances

1. CAS No 2.EC No 3.Index No 4.REACH No	%[weight]	Name	Classification according to regulation (EC) No 1272/2008 [CLP] and amendments	SCL / M-Factor	Nanoform Particle Characteristics
Not Available	100	6-Amino- 5-bromopyridine- 3-sulphonic acid	Not Applicable	Not Applicable	Not Available

Legend: 1. Classified by Chemwatch; 2. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 3. Classification drawn from C&L; * EU IOELVs available; [e] Substance identified as having endocrine disrupting properties

See 'Information on ingredients' in section 3.1

SECTION 4 First aid measures

4.1. Description of first aid measures If this product comes in contact with the eyes: Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally Eye Contact lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. If skin or hair contact occurs: Immediately flush body and clothes with large amounts of water, using safety shower if available. Skin Contact Quickly remove all contaminated clothing, including footwear. Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre. Transport to hospital, or doctor. If fumes or combustion products are inhaled remove from contaminated area. Lav patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor, without delay. Inhalation Inhalation of vapours or aerosols (mists, fumes) may cause lung oedema. Corrosive substances may cause lung damage (e.g. lung oedema, fluid in the lungs). As this reaction may be delayed up to 24 hours after exposure, affected individuals need complete rest (preferably in semi-recumbent posture) and must be kept under medical observation even if no symptoms are (yet) manifested. Before any such manifestation, the administration of a spray containing a dexamethasone derivative or beclomethasone derivative may be considered. This must definitely be left to a doctor or person authorised by him/her. (ICSC13719) For advice, contact a Poisons Information Centre or a doctor at once. Urgent hospital treatment is likely to be needed. If swallowed do NOT induce vomiting. • If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and Ingestion prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Transport to hospital or doctor without delay.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

4.3. Indication of any immediate medical attention and special treatment needed

For acute or short term repeated exposures to strong acids:

- Airway problems may arise from laryngeal edema and inhalation exposure. Treat with 100% oxygen initially.
- Respiratory distress may require cricothyroidotomy if endotracheal intubation is contraindicated by excessive swelling
- Intravenous lines should be established immediately in all cases where there is evidence of circulatory compromise.
- Strong acids produce a coagulation necrosis characterised by formation of a coagulum (eschar) as a result of the dessicating action of the acid on proteins in specific tissues.

INGESTION:

- Immediate dilution (milk or water) within 30 minutes post ingestion is recommended.
- DO NOT attempt to neutralise the acid since exothermic reaction may extend the corrosive injury.
- Be careful to avoid further vomit since re-exposure of the mucosa to the acid is harmful. Limit fluids to one or two glasses in an adult.
- Charcoal has no place in acid management.
- Some authors suggest the use of lavage within 1 hour of ingestion.

SKIN

- Skin lesions require copious saline irrigation. Treat chemical burns as thermal burns with non-adherent gauze and wrapping.
- Deep second-degree burns may benefit from topical silver sulfadiazine.

EYE:

- Eye injuries require retraction of the eyelids to ensure thorough irrigation of the conjuctival cul-de-sacs. Irrigation should last at least 20-30 minutes. DO NOT use neutralising agents or any other additives. Several litres of saline are required.
- Cycloplegic drops, (1% cyclopentolate for short-term use or 5% homatropine for longer term use) antibiotic drops, vasoconstrictive agents or artificial tears may be indicated dependent on the severity of the injury.
- * Steroid eye drops should only be administered with the approval of a consulting ophthalmologist).

[Ellenhorn and Barceloux: Medical Toxicology]

SECTION 5 Firefighting measures

5.1. Extinguishing media

- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.
- Water spray or fog Large fires only.

5.2. Special hazards arising from the substrate or mixture

Fire Incompatibility	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
----------------------	---

5.3. Advice for firefighters

Fire Fighting	
Fire/Explosion Hazard	 Combustible. Slight fire hazard when exposed to heat or flame. Acids may react with metals to produce hydrogen, a highly flammable and explosive gas. Heating may cause expansion or decomposition leading to violent rupture of containers. May emit acrid smoke and corrosive fumes. Combustion products include: carbon monoxide (CO) , carbon dioxide (CO2) , other pyrolysis products typical of burning organic material.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See section 8

6.2. Environmental precautions

See section 12

6.3. Methods and material for containment and cleaning up

Minor Spills	 Drains for storage or use areas should have retention basins for pH adjustments and dilution of spills before discharge or disposal of material. Check regularly for spills and leaks. Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labelled container for waste disposal.
Major Spills	

6.4. Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

	5
Safe handling	 Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contact with moisture. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke.

	 Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Launder contaminated clothing before re-use. Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.
Fire and explosion protection	See section 5
Other information	 Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.

7.2. Conditions for safe storage, including any incompatibilities

Suitable container	 DO NOT use aluminium or galvanised containers Check regularly for spills and leaks Lined metal can, lined metal pail/ can. Plastic pail. Polyliner drum. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks. For low viscosity materials Drums and jerricans must be of the non-removable head type. Where a can is to be used as an inner package, the can must have a screwed enclosure. For materials with a viscosity of at least 2680 cSt. (23 deg. C) and solids (between 15 C deg. and 40 deg C.): Removable head packaging; Cans with friction closures and low pressure tubes and cartridges may be used. Where combination packages are used, and the inner packages are of glass, porcelain or stoneware, there must be sufficient inert cushioning material in contact with inner and outer packages unless the outer packaging is a close fitting moulded plastic box and the substances are not incompatible with the plastic.
Storage incompatibility	 Segregate from alkalies, oxidising agents and chemicals readily decomposed by acids, i.e. cyanides, sulfides, carbonates. Reacts with mild steel, galvanised steel / zinc producing hydrogen gas which may form an explosive mixture with air. Avoid strong bases.
Hazard categories in accordance with Regulation (EC) No 1272/2008	Not Available
Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of	Not Available

7.3. Specific end use(s)

See section 1.2

SECTION 8 Exposure controls / personal protection

8.1. Control parameters

Ingredient	DNELs Exposure Pattern Worker	PNECs Compartment
Not Available	Not Available	Not Available

* Values for General Population

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Not Available						

Not Applicable

Emergency Limits

Ingredient	TEEL-1	TEEL-2		TEEL-3
6-Amino-5-bromopyridine- 3-sulphonic acid	Not Available	Not Available		Not Available
Ingredient	Original IDLH		Revised IDLH	
6-Amino-5-bromopyridine- 3-sulphonic acid	Not Available		Not Available Not Available	

8.2. Exposure controls

Engineering controls are used to remove a hazard or place engineering controls can be highly effective in protecting we provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job acti Enclosure and/or isolation of emission source which keeps that strategically "adds" and "removes" air in the work envir designed properly. The design of a ventilation system must Employers may need to use multiple types of controls to pr Local exhaust ventilation usually required. If risk of overexp obtain adequate protection.	orkers and will typically be independent of worker vity or process is done to reduce the risk. a selected hazard "physically" away from the wo onment. Ventilation can remove or dilute an air of match the particular process and chemical or co event employee overexposure. osure exists, wear approved respirator. Correct y be required in special circumstances. Correct	er interactions to orker and ventilatio contaminant if ontaminant in use. fit is essential to	
An approved self contained breathing apparatus (SCBA) m Provide adequate ventilation in warehouse or closed storage		place possess vary	
"escape" velocities which, in turn, determine the "capture velocities which, in turn, determine velocities which, in turn, determine velocities wh	elocities" of fresh circulating air required to effec	tively remove the	
Type of Contaminant:		Air Speed:	
solvent, vapours, degreasing etc., evaporating from tank	solvent, vapours, degreasing etc., evaporating from tank (in still air).		
o.z. i. Appropriate	aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)		
	direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)		
grinding, abrasive blasting, tumbling, high speed wheel g velocity into zone of very high rapid air motion).	grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).		
Within each range the appropriate value depends on:			
Lower end of the range	Upper end of the range		
1: Room air currents minimal or favourable to capture	1: Disturbing room air currents		
2: Contaminants of low toxicity or of nuisance value only.	2: Contaminants of high toxicity		
3: Intermittent, low production.	3: High production, heavy use		
4: Large hood or large air mass in motion	ss in motion 4: Small hood-local control only		
Simple theory shows that air velocity falls rapidly with distant generally decreases with the square of distance from the ex- extraction point should be adjusted, accordingly, after refer- extraction fan, for example, should be a minimum of 1-2 m/ meters distant from the extraction point. Other mechanical apparatus, make it essential that theoretical air velocities and installed or used.	Attraction point (in simple cases). Therefore the a ence to distance from the contaminating source. s (200-400 f/min) for extraction of solvents gene considerations, producing performance deficits	ir speed at the The air velocity a rated in a tank 2 within the extraction	

8.2.2. Individual protection measures, such as personal protective equipment

Eye and face protection



- Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent]
- ▶ Full face shield may be required for supplementary but never for primary protection of eyes.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should

	include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers
	have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].
Skin protection	See Hand protection below
Hands/feet protection	 Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber
Body protection	See Other protection below
Other protection	 Overalls. PVC Apron. PVC protective suit may be required if exposure severe. Eyewash unit. Ensure there is ready access to a safety shower.

Respiratory protection

Type -P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	P1 Air-line*	-	PAPR-P1 -
up to 50 x ES	Air-line**	P2	PAPR-P2
up to 100 x ES	-	P3	-
		Air-line*	-
100+ x ES	-	Air-line**	PAPR-P3

* - Negative pressure demand ** - Continuous flow

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

8.2.3. Environmental exposure controls

See section 12

SECTION 9 Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Pale brown				
Physical state	Solid	Relative density (Water = 1)	Not Available		
Odour	Not Available	Partition coefficient n-octanol / water	Not Available		
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available		
pH (as supplied)	Not Available	Decomposition temperature (°C)	Not Available		
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available		
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available		
Flash point (°C)	Not Available	Taste	Not Available		
Evaporation rate	Not Available	Explosive properties	Not Available		
Flammability	Not Available	Oxidising properties	Not Available		
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Applicable		
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available		
Vapour pressure (kPa)	Not Available	Gas group	Not Available		
Solubility in water	Not Available	pH as a solution (1%)	Not Available		

Vapour density (Air = 1)	Not Available	VOC g/L	Not Available
Nanoform Solubility	Not Available	Nanoform Particle Characteristics	Not Available
Particle Size	Not Available		

9.2. Other information

Not Available

SECTION 10 Stability and reactivity

10.1.Reactivity	See section 7.2
10.2. Chemical stability	Contact with alkaline material liberates heat
10.3. Possibility of hazardous reactions	See section 7.2
10.4. Conditions to avoid	See section 7.2
10.5. Incompatible materials	See section 7.2
10.6. Hazardous decomposition products	See section 5.3

SECTION 11 Toxicological information

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

Skin Contact Skin Portugation Skin Contact Skin Portugation Skin Contact Skin Portugation Eye The state of the s	cin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce walth damage following entry through wounds, lesions or abrasions. Deen cuts, abraded or irritated skin should not be exposed to this material htry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Attaining the skin prior to the use of the material and ensure that any external damage is suitably protected. The material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating. Applied to the eyes, this material causes severe eye damage. Ing-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body oblems. Jubstance accumulation, in the human body, may occur and may cause some concern following repeated or long-term iccupational exposure. Appeated or prolonged exposure to acids may result in the erosion of teeth, swelling and/or ulceration of mouth lining. Irritation of ways to lung, with cough, and inflammation of lung tissue often occurs.		
Skin Contact Skin Contact En Ex Eye fra fa Chronic	ealth damage following entry through wounds, lesions or abrasions. been cuts, abraded or irritated skin should not be exposed to this material htty into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. tamine the skin prior to the use of the material and ensure that any external damage is suitably protected. The material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating. applied to the eyes, this material causes severe eye damage. Ing-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body oblems. Ibstance accumulation, in the human body, may occur and may cause some concern following repeated or long-term		
Skin Contact Skin Contact En Ex	ealth damage following entry through wounds, lesions or abrasions. Deen cuts, abraded or irritated skin should not be exposed to this material htry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Are material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating.		
Skin Contact Op En	ealth damage following entry through wounds, lesions or abrasions. Deen cuts, abraded or irritated skin should not be exposed to this material htry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects.		
Th	ne material can produce chemical burns following direct contact with the skin.		
Ingestion Th	ne material can produce chemical burns within the oral cavity and gastrointestinal tract following ingestion. The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is becaus the lack of corroborating animal or human evidence.		
Inhaled da Cc	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Corrosive acids can cause irritation of the respiratory tract, with coughing, choking and mucous membrane damage. There may be dizziness, headache, nausea and weakness.		

Available	Not Available
 Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances 	
1	lue obtained from Europe ECHA Registered Substances - A

6-Amino-5-bromopyridine- 3-sulphonic acid	Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. On the other hand, industrial bronchitis is a disorder that occurs as a result of exposure due to high concentrations of irritating substance (often particles) and is completely reversible after exposure ceases. The disorder is characterized by difficulty breathing, cough and mucus production.
--	---

Acute Toxicity	×	Carcinogenicity	×
Skin Irritation/Corrosion	×	Reproductivity	×
Serious Eye Damage/Irritation	×	STOT - Single Exposure	×
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×
Mutagenicity	×	Aspiration Hazard	×

Legend: X – Data either not available or does not fill the criteria for classification Data available to make classification

11.2 Information on other hazards

11.2.1. Endocrine disrupting properties

No evidence of endocrine disrupting properties were found in the current literature.

11.2.2. Other information

See Section 11.1

SECTION 12 Ecological information

12.1. Toxicity

	Endpoint	Test Duration (hr)	Species	Value	Source
6-Amino-5-bromopyridine- 3-sulphonic acid	Not Available	Not Available	Not Available	Not Available	Not Available
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data				

Prevent, by any means available, spillage from entering drains or water courses. DO NOT discharge into sewer or waterways.

12.2. Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
	No Data available for all ingredients	No Data available for all ingredients

12.3. Bioaccumulative potential

Ingredient	Bioaccumulation	
	No Data available for all ingredients	

12.4. Mobility in soil

Ingredient	Mobility	
	No Data available for all ingredients	

12.5. Results of PBT and vPvB assessment

	Р	В	т
Relevant available data	Not Available	Not Available	Not Available
PBT	×	×	×
vPvB	×	×	×
PBT Criteria fulfilled?			Νο
vPvB			No

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties were found in the current literature.

12.7. Other adverse effects

No evidence of ozone depleting properties were found in the current literature.

SECTION 13 Disposal considerations

13.1. Waste treatment methods

Product / Packaging disposal	 Recycle wherever possible. Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified. Treat and neutralise at an approved treatment plant. Treatment should involve: Mixing or slurrying in water; Neutralisation with soda-lime or soda-ash followed by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or Incineration in a licensed apparatus (after admixture with suitable combustible material) Decontaminate empty containers with 5% aqueous sodium hydroxide or soda ash, followed by water. Observe all label safeguards until containers are cleaned and destroyed.
Waste treatment options	Not Available
Sewage disposal options	Not Available

SECTION 14 Transport information

Labels Required

Marine Pollutant	NO
HAZCHEM	2X

Land transport (ADR-RID)

14.1. UN number or ID number	3261				
14.2. UN proper shipping name	CORROSIVE SOL	ID, ACIDIC, OF	RGANIC,		
14.3. Transport hazard	Class	ass 8			
class(es)	Subsidiary risk Not Applicable				
14.4. Packing group	Ш				
14.5. Environmental hazard	Not Applicable				
	Hazard identifica	tion (Kemler)	80		
	Classification code		C4		
14.6. Special precautions	Hazard Label		8		
for user	Special provisions		274		
	Limited quantity		5 kg		
	Tunnel Restriction	on Code	3 (E)		

Air transport (ICAO-IATA / DGR)

· · ·			
14.1. UN number	3261		
14.2. UN proper shipping name	Corrosive solid, acidic, organic, n.o.s. *		
	ICAO/IATA Class	8	
14.3. Transport hazard class(es)	ICAO / IATA Subrisk	Not Applicable	
01033(03)	ERG Code	8L	
14.4. Packing group	III		
····· 5 5·····			

14.5. Environmental hazard	Not Applicable			
	Special provisions	A3 A803		
	Cargo Only Packing Instructions			
	Cargo Only Maximum Qty / Pack	100 kg		
14.6. Special precautions for user	Passenger and Cargo Packing Instructions	860		
	Passenger and Cargo Maximum Qty / Pack	25 kg		
	Passenger and Cargo Limited Quantity Packing Instructions	Y845		
	Passenger and Cargo Limited Maximum Qty / Pack	5 kg		

Sea transport (IMDG-Code / GGVSee)

14.1. UN number	3261			
14.2. UN proper shipping name	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.			
14.3. Transport hazard	IMDG Class 8	3		
class(es)	IMDG Subrisk N	Not Applicable		
14.4. Packing group	III			
14.5. Environmental hazard	Not Applicable			
14.6. Special precautions for user	EMS Number	F-A, S-B		
	Special provisions	223 274		
	Limited Quantities	5 kg		

Inland waterways transport (ADN)

14.1. UN number	3261		
14.2. UN proper shipping name	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.		
14.3. Transport hazard class(es)	8 Not Applicable		
14.4. Packing group	III		
14.5. Environmental hazard	Not Applicable		
14.6. Special precautions for user	Classification code	C4	
	Special provisions	274	
	Limited quantity	5 kg	
	Equipment required	PP, EP	
	Fire cones number	0	

14.7. Maritime transport in bulk according to IMO instruments

14.7.1. Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

14.7.2. Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group

14.7.3. Transport in bulk in accordance with the IGC Code

Product name Ship Type

SECTION 15 Regulatory information

15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - : Directives 98/24/EC, - 92/85/EEC, - 94/33/EC, - 2008/98/EC, - 2010/75/EU; Commission Regulation (EU) 2020/878; Regulation (EC) No 1272/2008 as updated through ATPs.

Information according to 2012/18/EU (Seveso III):

Seveso Category	Not Available

15.2. Chemical safety assessment

For further information please look at the Chemical Safety Assessment and Exposure Scenarios prepared by your Supply Chain if available.

ECHA SUMMARY

Not Applicable

National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Not Available
Canada - DSL	Not Available
Canada - NDSL	Not Available
China - IECSC	Not Available
Europe - EINEC / ELINCS / NLP	Not Available
Japan - ENCS	Not Available
Korea - KECI	Not Available
New Zealand - NZIoC	Not Available
Philippines - PICCS	Not Available
USA - TSCA	Not Available
Taiwan - TCSI	Not Available
Mexico - INSQ	Not Available
Vietnam - NCI	Not Available
Russia - FBEPH	Not Available
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.

SECTION 16 Other information

Revision Date	16/05/2022
Initial Date	16/05/2022

Full text Risk and Hazard codes

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:

- EN 166 Personal eye-protection
- EN 340 Protective clothing
- EN 374 Protective gloves against chemicals and micro-organisms
- EN 13832 Footwear protecting against chemicals
- EN 133 Respiratory protective devices

Definitions and abbreviations

- PC TWA: Permissible Concentration-Time Weighted Average
- PC STEL: Permissible Concentration-Short Term Exposure Limit
- IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists STEL: Short Term Exposure Limit TEEL: Temporary Emergency Exposure Limit. IDLH: Immediately Dangerous to Life or Health Concentrations ES: Exposure Standard OSF: Odour Safety Factor NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value **BCF: BioConcentration Factors BEI: Biological Exposure Index** AIIC: Australian Inventory of Industrial Chemicals **DSL:** Domestic Substances List NDSL: Non-Domestic Substances List IECSC: Inventory of Existing Chemical Substance in China EINECS: European INventory of Existing Commercial chemical Substances ELINCS: European List of Notified Chemical Substances NLP: No-Longer Polymers ENCS: Existing and New Chemical Substances Inventory KECI: Korea Existing Chemicals Inventory NZIoC: New Zealand Inventory of Chemicals PICCS: Philippine Inventory of Chemicals and Chemical Substances TSCA: Toxic Substances Control Act TCSI: Taiwan Chemical Substance Inventory INSQ: Inventario Nacional de Sustancias Químicas NCI: National Chemical Inventory FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

Powered by AuthorITe, from Chemwatch.