

Triethylmethylammonium Tetrafluoroborate **Apollo Scientific**

Part Number: OR72831 Version No: 1.1 Safety Data Sheet

Chemwatch Hazard Alert Code: 3

Issue Date: 14/09/2023 Print Date: 14/09/2023 S.GHS.GB-NIR.EN

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

Product Identifier

Product name	Triethylmethylammonium Tetrafluoroborate			
Chemical Name	ethylmethylammonium tetrafluoroborate			
Synonyms	t Available			
Proper shipping name	CORROSIVE SOLID, N.O.S.			
Other means of identification	Not Available			
CAS number	69444-47-9*			

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

Relevant identified uses

Not Available

Details of the manufacturer or supplier of the safety data sheet

Registered company name	Apollo Scientific	Apollo Scientific Itd	
Address	Whitefield Road, Bredbury SK62QR United Kingdom	Whitefield Road, Bredbury SK6 2QR Northern Ireland (UK)	
Telephone	01614060505	+44(0) 161 406 0505	
Fax	0161 406 0506	Not Available apolloscientific.co.uk	
Website	http://www.apolloscientific.co.uk/		
Email	sales@apolloscientific.co.uk	sales@apolloscientific.co.uk	

Emergency telephone number

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

SECTION 2 Hazards identification

Classification of the substance or mixture

Classification according to regulation (EC) No 1272/2008 [CLP] and amendments ^[1]	H290 - Corrosive to Metals Category 1, H302 - Acute Toxicity (Oral) Category 4, H314 - Skin Corrosion/Irritation Category 1B, H318 - Serious Eye Damage/Eye Irritation Category 1, H335 - Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) Category 3
Legend:	1. Classified by Chemwatch; 2. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

Label elements

Hazard pictogram(s)		
Signal word	Danger	

Hazard statement(s)

H290	May be corrosive to metals.			
H302	armful if swallowed.			
H314	Causes severe skin burns and eye damage.			
H335	May cause respiratory irritation.			

Precautionary statement(s) Prevention

P260	Do not breathe dust/fume.				
P264	Wash all exposed external body areas thoroughly after handling.				
P271	Use only outdoors or in a well-ventilated area.				
P280	Wear protective gloves, protective clothing, eye protection and face protection.				
P234	Keep only in original packaging.				
P270	Do not eat, drink or smoke when using this product.				

Precautionary statement(s) Response

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

Precautionary statement(s) Storage

P405	Store locked up.			
P403+P233 Store in a well-ventilated place. Keep container tightly closed.				

Precautionary statement(s) Disposal

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

SECTION 3 Composition / information on ingredients

Substances

CAS No	%[weight]	Name	Classification according to regulation (EC) No 1272/2008 [CLP] and amendments	SCL / M-Factor

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

Mixtures

See section above for composition of Substances

SECTION 4 First aid measures

Eye Contact	 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 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.
Skin Contact	 If skin or hair contact occurs: Immediately flush body and clothes with large amounts of water, using safety shower if available. 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.
Inhalation	 If fumes or combustion products are inhaled remove from contaminated area. Lay 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 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)
Ingestion	 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 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.

Indication of any immediate medical attention and special treatment needed

for corrosives:

BASIC TREATMENT

- Establish a patent airway with suction where necessary.
- Watch for signs of respiratory insufficiency and assist ventilation as necessary.
- Administer oxygen by non-rebreather mask at 10 to 15 l/min.
- Monitor and treat, where necessary, for pulmonary oedema.
- Monitor and treat, where necessary, for shock.
- Anticipate seizures.
- Where eyes have been exposed, flush immediately with water and continue to irrigate with normal saline during transport to hospital.
- DO NOT use emetics. Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.
- Skin burns should be covered with dry, sterile bandages, following decontamination.
- **DO NOT** attempt neutralisation as exothermic reaction may occur.

ADVANCED TREATMENT

- Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.
- Positive-pressure ventilation using a bag-valve mask might be of use.
- Monitor and treat, where necessary, for arrhythmias.
- Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.
- Drug therapy should be considered for pulmonary oedema.
- Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.
- Treat seizures with diazepam.
- Proparacaine hydrochloride should be used to assist eye irrigation.

EMERGENCY DEPARTMENT

Laboratory analysis of complete blood count, serum electrolytes, BUN, creatinine, glucose, urinalysis, baseline for serum aminotransferases (ALT and AST),

calcium, phosphorus and magnesium, may assist in establishing a treatment regime.

- Positive end-expiratory pressure (PEEP)-assisted ventilation may be required for acute parenchymal injury or adult respiratory distress syndrome.
- Consider endoscopy to evaluate oral injury.
- Consult a toxicologist as necessary.

BRONSTEIN, A.C. and CURRANCE, P.L. EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

SECTION 5 Firefighting measures

Extinguishing media

- ▶ There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

Special hazards arising from the substrate or mixture

Fire I	ncompatibility	None known.
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Advice for firefighters

Fire Fighting	
Fire/Explosion Hazard	 Non combustible. Not considered a significant fire risk, however containers may burn. May emit corrosive fumes.

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

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	

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

SECTION 7 Handling and storage

Precautions for safe handling

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.
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Conditions for safe storage, including any incompatibilities

Suitable container	 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. -
Storage incompatibility	Dangerous goods of other classes.

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Not Available

Emergency Limits

Ingredient	TEEL-1	TEEL-2		TEEL-3
Triethylmethylammonium Tetrafluoroborate	Not Available	Not Available		Not Available
Ingredient	Original IDLH		Revised IDLH	
Triethylmethylammonium Tetrafluoroborate	Not Available		Not Available	

Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. We engineering controls can be highly effective in protecting workers and will typically be independent of worker provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the wo that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air c designed properly. The design of a ventilation system must match the particular process and chemical or co Employers may need to use multiple types of controls to prevent employee overexposure. Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator. Correct fi ensure adequate protection. An approved self contained breathing apparatus (SCBA) may be required in some situations. Provide adel self contained breathing apparatus (scBA) may be required in some situations.	r interactions to rker and ventilation ontaminant if ntaminant in use. it is essential to it is essential to lace possess varying
	Type of Contaminant:	Air Speed:

	solvent, vapours, degreasing etc., evaporating from tank (in still air).		0.25-0.5 m/s (50-100 f/min.)	
	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)			0.5-1 m/s (100-200 f/min.)
	direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)			1-2.5 m/s (200-500 f/min.)
	grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).			2.5-10 m/s (500-2000 f/min.)
	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	4: Small hood-local control only		
Individual protection	apparatus, make it essential that theoretical air velocities a installed or used.	re multiplied by factors of 10 or m	ore when extrac	ction systems are
Individual protection measures, such as				
personal protective equipment				
	 Chemical goggles. [AS/NZS 1337.1, EN166 or national Full face shield may be required for supplementary but Contact lenses may pose a special hazard; soft contact document, describing the wearing of lenses or restriction include a review of lens absorption and adsorption for the Medical and first-aid personnel should be trained in the event of chemical exposure, begin eye irrigation immediate be removed at the first signs of eye redness or irritation have washed hands thoroughly. [CDC NIOSH Current Interpreted to the second second	never for primary protection of ey t lenses may absorb and concentr ons on use, should be created for he class of chemicals in use and a ir removal and suitable equipment diately and remove contact lens as a lens should be removed in a clear	rate irritants. A v each workplace an account of in t should be read s soon as praction	or task. This should jury experience. dily available. In the cable. Lens should
equipment	 Full face shield may be required for supplementary but Contact lenses may pose a special hazard; soft contact document, describing the wearing of lenses or restriction include a review of lens absorption and adsorption for the Medical and first-aid personnel should be trained in the event of chemical exposure, begin eye irrigation immediate be removed at the first signs of eye redness or irritation 	never for primary protection of ey t lenses may absorb and concentr ons on use, should be created for he class of chemicals in use and a ir removal and suitable equipment diately and remove contact lens as a lens should be removed in a clear	rate irritants. A v each workplace an account of in t should be read s soon as praction	or task. This should jury experience. dily available. In the cable. Lens should
equipment	 Full face shield may be required for supplementary but Contact lenses may pose a special hazard; soft contact document, describing the wearing of lenses or restriction include a review of lens absorption and adsorption for t Medical and first-aid personnel should be trained in the event of chemical exposure, begin eye irrigation immed be removed at the first signs of eye redness or irritation have washed hands thoroughly. [CDC NIOSH Current Internation of the context of	never for primary protection of ey t lenses may absorb and concentr ons on use, should be created for he class of chemicals in use and a ir removal and suitable equipment diately and remove contact lens as a lens should be removed in a clear	rate irritants. A v each workplace an account of in t should be read s soon as praction	or task. This should jury experience. dily available. In the cable. Lens should
equipment Eye and face protection Skin protection	 Full face shield may be required for supplementary but Contact lenses may pose a special hazard; soft contact document, describing the wearing of lenses or restriction include a review of lens absorption and adsorption for the Medical and first-aid personnel should be trained in the event of chemical exposure, begin eye irrigation immediate the first signs of eye redness or irritation have washed hands thoroughly. [CDC NIOSH Current In See Hand protection below Wear chemical protective gloves, e.g. PVC. 	never for primary protection of ey t lenses may absorb and concentr ons on use, should be created for he class of chemicals in use and a ir removal and suitable equipment diately and remove contact lens as a lens should be removed in a clear	rate irritants. A v each workplace an account of in t should be read s soon as praction	or task. This should jury experience. dily available. In the cable. Lens should

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)

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Not Available		
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)	320	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

SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 Toxicological information

Information on toxicological effects

Inhaled	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.		
Ingestion	The 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 because of the lack of corroborating animal or human evidence.		
Skin Contact	The material can produce chemical burns following direct contact with the skin. Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.		
Eye	The material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating.		
Chronic	Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue. Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.		
	ΤΟΧΙΟΙΤΥ	IRRITATION	
Triethylmethylammonium Tetrafluoroborate	Oral (Rat) LD50: >300<2000 mg/kg ^[1]	Eye: no adverse effect observed (not irritating) ^[1]	
letrafiuoroporate		Skin: no adverse effect observed (not irritating) ^[1]	

Legend: 1. 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

Acute Toxicity		Carcinogenicity	v
	and duration of exposure to the irritating subst	ance. On the other hand, industrial g substance (often particles) and is	disorder with rates related to the concentration of bronchitis is a disorder that occurs as a result of s completely reversible after exposure ceases.
Tetrafluoroborate	bronchial hyperreactivity on methacholine cha	llenge testing, and the lack of minir	nal lymphocytic inflammation, without
Triethylmethylammonium	non-allergic condition known as reactive airwa highly irritating compound. Main criteria for dia individual, with sudden onset of persistent astl irritant. Other criteria for diagnosis of RADS in	gnosing RADS include the absenc nma-like symptoms within minutes	to hours of a documented exposure to the
	Asthma-like symptoms may continue for mont	• •	

Acute Toxicity	×	Carcinogenicity	×
Skin Irritation/Corrosion	×	Reproductivity	×
Serious Eye Damage/Irritation	*	STOT - Single Exposure	•
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×
Mutagenicity	×	Aspiration Hazard	×
	Le	gend: 🗙 – Data either not ava	ailable or does not fill the criteria for classification

Data available to make classification

SECTION 12 Ecological information

Toxicity

	Endpoint	Test Duration (hr)	Species	Value	Source
Triethylmethylammonium	EC50	72h	Algae or other aquatic plants	>103mg/l	2
Tetrafluoroborate	EC50	48h	Crustacea	106mg/l	2
	NOEC(ECx)	48h	Crustacea	23.6mg/l	2

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.

Persistence and degradability

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

Bioaccumulative potential

Ingredient	Bioaccumulation
	No Data available for all ingredients

Mobility in soil

Ingredient	Mobility
	No Data available for all ingredients

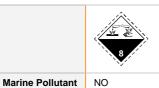
SECTION 13 Disposal considerations

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 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. Observe all label safeguards until containers are cleaned and destroyed.
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SECTION 14 Transport information

Labels Required



Land transport (ADR-RID)

14.1. UN number or ID number	1759			
14.2. UN proper shipping name	CORROSIVE SOL	ID, N.O.S.		
14.3. Transport hazard class(es)	Class Subsidiary risk	8 Not Applicab	le	
14.4. Packing group	III		-	
14.5. Environmental hazard	Not Applicable	Not Applicable		
	Hazard identifica	ation (Kemler)	80	
	Classification code		C10	
14.6. Special precautions for user	Hazard Label		8	
	Special provision	าร	274	
	Limited quantity		5 kg	

Tunnel Restriction Code

de 3 (E)

Air transport (ICAO-IATA / DGR)

14.1. UN number	1759				
14.2. UN proper shipping name	Corrosive solid, n.o.s. *				
14.3. Transport hazard class(es)	ICAO/IATA Class ICAO / IATA Subsidiary Hazard				
	ERG Code	8L			
14.4. Packing group	III				
14.5. Environmental hazard	Not Applicable				
	Special provisions		A3 A803		
	Cargo Only Packing Instructions		864		
	Cargo Only Maximum Qty / Pack		100 kg		
14.6. Special precautions for user	Passenger and Cargo Packing In	structions	860		
	Passenger and Cargo Maximum	Qty / Pack	25 kg		
	Passenger and Cargo Limited Qu	uantity Packing Instructions	Y845		
	Passenger and Cargo Limited Ma	aximum Qty / Pack	5 kg		

Sea transport (IMDG-Code / GGVSee)

14.1. UN number	1759		
14.2. UN proper shipping name	CORROSIVE SOLID,	, N.O.S.	
14.3. Transport hazard	IMDG Class 8		
class(es)	IMDG Subrisk N	lot Applicable	
14.4. Packing group	III		
14.5 Environmental hazard	Not Applicable		
	EMS Number	F-A, S-B	
14.6. Special precautions for user	Special provisions	223 274	
	Limited Quantities	5 kg	

Inland waterways transport (ADN)

14.1. UN number	1759		
14.2. UN proper shipping name	CORROSIVE SOLID, N.O.S.		
14.3. Transport hazard class(es)	8 Not Applicable		
14.4. Packing group	ш		
14.5. Environmental hazard	Not Applicable		
	Classification code	C10	
	Special provisions	274	
14.6. Special precautions for user	Limited quantity	5 kg	
	Equipment required	PP, EP	
	Fire cones number	0	

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

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

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	14/09/2023
Initial Date	15/09/2023

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 040 Parts at a shatt is a

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

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Classification according to regulation (EC) No 1272/2008 [CLP] and amendments	Classification Procedure
Corrosive to Metals Category 1, H290	On basis of test data
Acute Toxicity (Oral) Category 4, H302	Expert judgement
Skin Corrosion/Irritation Category 1B, H314	Expert judgement
Serious Eye Damage/Eye Irritation Category 1, H318	Expert judgement
Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) Category 3, H335	Expert judgement

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