

Apollo Scientific

Part Number: **OR345384** 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: **03/08/2023** S.REACH.GBR.EN

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

1.1. Product Identifier

Product name	3-Acetyl-2-hydroxypyridine
Chemical Name	3-acetyl-2(1H)-pyridinone
Synonyms	Not Available
Proper shipping name	TOXIC SOLID, ORGANIC, N.O.S.
Chemical formula	Not Available
Other means of identification	Not Available
CAS number	62838-65-7*

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	Whitefield 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]

H301 - Acute Toxicity (Oral) Category 3

Legend:	1. Classified by Chemwatch; 2. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI		
.2. Label elements			
Hazard pictogram(s)			
Signal word	Danger		
lazard statement(s)			
H301	Toxic if swallowed.		
Supplementary statemen			
Supplementary statemen Not Applicable	t(s)		
Supplementary statemen Not Applicable	t(s)		
Supplementary statemen Not Applicable Precautionary statement(t(s) (s) Prevention		
Supplementary statemen Not Applicable Precautionary statement(P264 P270	t(s) (s) Prevention Wash all exposed external body areas thoroughly after handling. Do not eat, drink or smoke when using this product.		
Supplementary statemen Not Applicable Precautionary statement(P264 P270	t(s) (s) Prevention Wash all exposed external body areas thoroughly after handling. Do not eat, drink or smoke when using this product.		
Supplementary statemen Not Applicable Precautionary statement(P264 P270 Precautionary statement(t(s) s) Prevention Wash all exposed external body areas thoroughly after handling. Do not eat, drink or smoke when using this product. s) Response		
Supplementary statemen Not Applicable Precautionary statement(P264 P270 Precautionary statement(P301+P310	t(s) (s) Prevention Wash all exposed external body areas thoroughly after handling. Do not eat, drink or smoke when using this product. (s) Response IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider. Rinse mouth.		

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

2.3. Other hazards

Inhalation and/or ingestion may produce health damage*.

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	3-Acetyl- 2-hydroxypyridine	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

3.2.Mixtures

See 'Information on ingredients' in section 3.1

SECTION 4 First aid measures

4.1. Description of first aid measures

Eye Contact

If this product comes in contact with the eyes:

- Wash out immediately with fresh 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.

	 Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	 If skin or hair contact occurs: Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
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.
Ingestion	 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. Seek medical advice.

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

As in all cases of suspected poisoning, follow the ABCDEs of emergency medicine (airway, breathing, circulation, disability, exposure), then the ABCDEs of toxicology (antidotes, basics, change absorption, change distribution, change elimination). For poisons (where specific treatment regime is absent):

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.
- 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.

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.

BRONSTEIN, A.C. and CURRANCE, P.L.

EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

SECTION 5 Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substrate or mixture

Fire Incompatibility	None known.
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5.3. Advice for firefighters

Fire Fighting	 Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire.
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Continued...

3-Acetyl-2-hydroxypyridine

	Prevent, by any means available, spillage from entering drains or water courses.
	Use fire fighting procedures suitable for surrounding area.
	DO NOT approach containers suspected to be hot.
	Cool fire exposed containers with water spray from a protected location.
	If safe to do so, remove containers from path of fire.
	Equipment should be thoroughly decontaminated after use.
	Non combustible.
Fire/Explosion Hazard	Not considered a significant fire risk, however containers may burn.
	May emit poisonous fumes.

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	 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	 Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Neutralise/decontaminate residue (see Section 13 for specific agent). Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using. If contamination of drains or waterways occurs, advise emergency services.

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

Safe handling	 Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. 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. Obegone manufacturer's storage and handling recommendations contained within this SDS
	 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 Lined metal can, lined metal pail/ can. Plastic pail. Polvliner 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; Suitable container Cans with friction closures and Iow pressure tubes and cartridges may be used. Where combination packages are used, and the inner packages are of glass, there must be sufficient inert cushioning material in contact with inner and outer packages *. In addition, where inner packagings are glass and contain liquids of packing group I and II there must be sufficient inert absorbent to absorb any spillage *. * unless the outer packaging is a close fitting moulded plastic box and the substances are not incompatible with the plastic. None known Storage incompatibility Store under argon Hazard categories in accordance with Not Available **Regulation (EC) No** 1272/2008 **Qualifying quantity** (tonnes) of dangerous substances as referred to Not Available in Article 3(10) for the application of

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
3-Acetyl-2-hydroxypyridine	Not Available	Not Available		Not Available
Ingredient	Original IDLH		Revised IDLH	
3-Acetyl-2-hydroxypyridine	Not Available		Not Available	

8.2. Exposure controls

	Engineering controls are used to remove a hazard or place a engineering controls can be highly effective in protecting wor provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activi Enclosure and/or isolation of emission source which keeps a that strategically "adds" and "removes" air in the work enviro designed properly. The design of a ventilation system must n Employers may need to use multiple types of controls to prev Local exhaust ventilation usually required. If risk of overexpo obtain adequate protection. Supplied-air type respirator may ensure adequate protection. An approved self contained breathing apparatus (SCBA) ma Provide adequate ventilation in warehouse or closed storage "escape" velocities which, in turn, determine the "capture vel contaminant. Type of Contaminant:	kers and will typically be independent of work ty or process is done to reduce the risk. selected hazard "physically" away from the work nment. Ventilation can remove or dilute an air natch the particular process and chemical or went employee overexposure. sure exists, wear approved respirator. Correct be required in special circumstances. Correct y be required in some situations.	xer interactions to worker and ventilation r contaminant if contaminant in use. et fit is essential to t fit is essential to kplace possess varying	
8.2.1. Appropriate engineering controls	wolding spray drift plating acid fumos, pickling (released at low velocity into zone of active			
	grinding, abrasive blasting, tumbling, high speed wheel get velocity into zone of very high rapid air motion).	nerated dusts (released at high initial	(200-500 f/min.) 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		
	Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.			
8.2.2. Individual protection measures, such as personal protective equipment				
Eye and face protection	 Safety glasses with side shields Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent] 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	The selection of suitable gloves does not only depend on the manufacturer to manufacturer. Where the chemical is a prep can not be calculated in advance and has therefore to be chu The exact break through time for substances has to be obtait observed when making a final choice. Personal hygiene is a key element of effective hand care. Gl should be washed and dried thoroughly. Application of a non Suitability and durability of glove type is dependent on usage . frequency and duration of contact,	aration of several substances, the resistance ecked prior to the application. ned from the manufacturer of the protective g oves must only be worn on clean hands. Afte -perfumed moisturiser is recommended.	of the glove material loves and has to be r using gloves, hands	

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	chemical resistance of glove material,
	· glove thickness and
	· dexterity
	Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).
	When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time
	greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
	When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes
	according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
	Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for
	long-term use.
	· Contaminated gloves should be replaced.
	As defined in ASTM F-739-96 in any application, gloves are rated as:
	• Excellent when breakthrough time > 480 min
	• Good when breakthrough time > 20 min
	· Fair when breakthrough time < 20 min
	· Poor when glove material degrades
	For general applications, gloves with a thickness typically greater than 0.35 mm, are recommended.
	It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the
	permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection
	should also be based on consideration of the task requirements and knowledge of breakthrough times.
	Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the
	manufacturers technical data should always be taken into account to ensure selection of the most appropriate glove for the task.
	Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example:
	• Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these
	gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of.
	• Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there
	is abrasion or puncture potential
	Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a
	non-perfumed moisturiser is recommended.
	 Wear chemical protective gloves, e.g. PVC.
	Wear safety footwear or safety gumboots, e.g. Rubber
Body protection	See Other protection below
	► Overalls.
	► Eyewash unit.
Other protection	► Barrier cream.
	 Skin cleansing cream.
	, v

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)

Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures.

• The decision to use respiratory protection should be based on professional judgment that takes into account toxicity information, exposure measurement data, and frequency and likelihood of the worker's exposure - ensure users are not subject to high thermal loads which may result in heat stress or distress due to personal protective equipment (powered, positive flow, full face apparatus may be an option).

• Published occupational exposure limits, where they exist, will assist in determining the adequacy of the selected respiratory protection. These may be government mandated or vendor recommended.

• Certified respirators will be useful for protecting workers from inhalation of particulates when properly selected and fit tested as part of a complete respiratory protection program.

• Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

 \cdot Use approved positive flow mask if significant quantities of dust becomes airborne.

 \cdot Try to avoid creating dust conditions.

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	Beige			
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	 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
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

Inhaled	The material is not thought to produce respiratory irritation (as classified by EC Directives using animal models). Nevertheless inhalation of dusts, or fumes, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress. Inhalation of dusts, generated by the material during the course of normal handling, may be damaging to the health of the individual.
Ingestion	Accidental ingestion of the material may be damaging to the health of the individual.

Skin Contact	The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. 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	Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may cause transient discomfort characterised by tearing or conjunctival redness (as with windburn). Slight abrasive damage may also result.		
Chronic	Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.		
	ΤΟΧΙΟΙΤΥ	IRRITATION	
3-Acetyl-2-hydroxypyridine	Not Available	Not Available	
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	×
Skin Irritation/Corrosion	×	Reproductivity	×
Serious Eye Damage/Irritation	×	STOT - Single Exposure	×
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×
Mutagenicity	×	Aspiration Hazard	×

Data on the 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

3-Acetyl-2-hydroxypyridine	Endpoint	Test Duration (hr)	Species	Value	Source	
	Not Available	Not Available	Not Available	Not Available	Not Available	
Legend:	4. US EPA, E	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				

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 Ava	ailable
PBT	×	×	×	
vPvB	×	×	×	
PBT Criteria fulfilled?				No
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 or consult manufacturer for recycling options. Consult State Land Waste Management Authority for disposal. Bury residue in an authorised landfill. Recycle containers if possible, or dispose of in an authorised landfill.
Waste treatment options	Not Available
Sewage disposal options	Not Available

SECTION 14 Transport information

Labels Required

	6
Marine Pollutant	NO
HAZCHEM	2X

Land transport (ADR-RID)

	-			
14.1. UN number or ID number	2811	2811		
14.2. UN proper shipping name	TOXIC SOLID, OF	TOXIC SOLID, ORGANIC, N.O.S.		
14.3. Transport hazard	Class	6.1		
class(es)	Subsidiary risk	Not Applicab	le	
14.4. Packing group	Ш	III		
14.5. Environmental hazard	Not Applicable	Not Applicable		
	Hazard identifica	ation (Kemler)	60	
	Classification co	de	T2	
14.6. Special precautions	Hazard Label		6.1	
for user	Special provisions		274 614	
	Limited quantity		5 kg	
	Tunnel Restriction Code		2 (E)	

Air transport (ICAO-IATA / DGR)

14.1. UN number	2811	2811				
14.2. UN proper shipping name	Toxic solid, organic, n.o	Toxic solid, organic, n.o.s. *				
14.3. Transport hazard	ICAO/IATA Class 6.1					
class(es)		ICAO / IATA Subrisk Not Applicable				
	ERG Code	ERG Code 6L				
14.4. Packing group	III					
14.5. Environmental hazard	Not Applicable					
	Special provisions		A3 A5			
	Cargo Only Packing I	nstructions	677			
	Cargo Only Maximum	Qty / Pack	200 kg			
14.6. Special precautions for user	Passenger and Cargo	Packing Instructions	670			
	Passenger and Cargo	Maximum Qty / Pack	100 kg			
	Passenger and Cargo	Limited Quantity Packing Instructions	Y645			
	Passenger and Cargo	Limited Maximum Qty / Pack	10 kg			

Sea transport (IMDG-Code / GGVSee)

14.1. UN number	2811	2811		
14.2. UN proper shipping name	TOXIC SOLID, ORG	TOXIC SOLID, ORGANIC, N.O.S.		
14.3. Transport hazard	IMDG Class	6.1		
class(es)	IMDG Subrisk	Not Applicable		
14.4. Packing group	Ш	III		
14.5. Environmental hazard	Not Applicable	Not Applicable		
	EMS Number	F-A, S-A		
14.6. Special precautions for user	Special provisions	223 274		
	Limited Quantities	5 kg		

Inland waterways transport (ADN)

14.1. UN number	2811			
14.2. UN proper shipping name	TOXIC SOLID, ORGAN	TOXIC SOLID, ORGANIC, N.O.S.		
14.3. Transport hazard class(es)	6.1 Not Applicable			
14.4. Packing group				
14.5. Environmental hazard	Not Applicable			
	Classification code	T2		
	Special provisions 274; 614; 802			
14.6. Special precautions for user	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 i	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 DSI · 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

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