

Swan Analytical Australia Pty Ltd

Chemwatch: **21-7512** Version No: **7.1** Safety Data Sheet according to Work Health and Safety Regulations (Hazardous Chemicals) 2023 and ADG requirements Chemwatch Hazard Alert Code: 1

Issue Date: **23/12/2022** Print Date: **21/08/2024** S.GHS.AUS.EN

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

Product Identifier

Product name	Swan Oxycon On-Line Buffer
Chemical Name	Not Applicable
Synonyms	Not Available
Chemical formula	Not Applicable
Other means of identification	Not Available

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

Details of the manufacturer or supplier of the safety data sheet

Registered company name	Swan Analytical Australia Pty Ltd	SWAN Analytical New Zealand Pty Ltd
Address	Unit 12 45 Leighton Place Hornsby NSW 2077 Australia	PO Box 125201 St Heliers, Auckland 1740 New Zealand
Telephone	+61 2 9482 1455	+64 (0)9 213 7191
Fax	+61 2 9482 1489	Not Available
Website	www.swan.ch	www.swan-analytical.co.nz
Email	sales@swan-analytical.com.au	sales@swan-analytical.co.nz

Emergency telephone number

Association / Organisation	Chemwatch	CHEMWATCH EMERGENCY RESPONSE (24/7)
Emergency telephone numbers	+800 2436 2255	+61 1800 951 288
Other emergency telephone numbers	+64 (0)9 213 7191	+61 3 9573 3188

Once connected and if the message is not in your preferred language then please dial 01

SECTION 2 Hazards identification

Classification of the substance or mixture

NON-HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Chemwatch Hazard Ratings

	Min	Max	
Flammability	1		
Toxicity	0		0 = Minimum
Body Contact	0		1 = Low
Reactivity	1		2 = Moderate
Chronic	0		3 = High 4 = Extreme

Poisons Schedule	Not Applicable
Classification ^[1]	Not Applicable

Label elements

Hazard pictogram(s)	Not Applicable
Signal word	Not Applicable

Precautionary statement(s) Prevention Not Applicable Precautionary statement(s) Response Not Applicable

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
6100-05-6	>95	tripotassium citrate monohydrate
6381-92-6	NotSpec	EDTA disodium salt dihydrate
Legend:	 Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&L * EU IOELVs available 	

SECTION 4 First aid measures

Description of 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: Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation. Do NOT use solvents/thinners. 	
Inhalation	 If dust is inhaled, remove from contaminated area. Encourage patient to blow nose to ensure clear passage of breathing. If irritation or discomfort persists seek medical attention. 	
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. 	

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

For potassium intoxications:

- + Hyperkalaemia, in patients with abnormal renal function, results from reduced renal excretion following intoxication.
- The presence of electrocardiographic evidence of hyperkalemia or serum potassium levels exceeding 7.5 mE/L indicates a medical emergency requiring an intravenous line and constant cardiac monitoring.
 The intravenous ingestion of 5-10 ml of 10% calcium gluconate, in adults, over a 2 minute period antagonises the cardiac and neuromuscular effects. The duration of action
- is approximately 1 hour. [Ellenhorn and Barceloux: Medical Toxicology]

SECTION 5 Firefighting measures

Extinguishing media

Alcohol stable foam.

- Dry chemical powder.
- BCF (where regulations permit).

Carbon dioxide Do not use water jets.

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
Advice for firefighters	
Fire Fighting	 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 courses. Use water delivered as a fine spray to control fire and cool adjacent area.
Fire/Explosion Hazard	 Combustible solid which burns but propagates flame with difficulty; it is estimated that most organic dusts are combustible (circa 70%). according to the circumstances under which the combustion process occurs, such materials may cause fires and / or dust explosions. Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions).

	 Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust (420 micron or less) may burn rapidly and fiercely if ignited - particles exceeding this limit will generally not form flammable dust clouds; once initiated, however, larger particles up to 1400 microns diameter will contribute to the propagation of an explosion. Combustion products include: carbon monoxide (CO) carbon dioxide (CO2) metal oxides other pyrolysis products typical of burning organic material.
HAZCHEM	Not Applicable

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	 Clean up all spills immediately. Avoid contact with skin and eyes. Wear impervious gloves and safety glasses. Use dry clean up procedures and avoid generating dust.
Major Spills	 Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Control personal contact with the substance, by using protective equipment and dust respirator. Prevent spillage from entering drains, sewers or water courses.

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

SECTION 7 Handling and storage

Safe handling	 Limit all unnecessary personal contact. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contact with incompatible materials. Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions) Minimise airborne dust and eliminate all ignition sources. Keep away from heat, hot surfaces, sparks, and flame. Establish good housekeeping practices. Remove dust accumulations on a regular basis by vacuuming or gentle sweeping to avoid creating dust clouds.
Other information	 Consider storage under inert gas. Material is hygroscopic, i.e. absorbs moisture from the air. Keep containers well sealed in storage. Store in original containers. Keep containers securely sealed. Store in a cool, dry area protected from environmental extremes. Store away from incompatible materials and foodstuff containers.

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.
Storage incompatibility	 Avoid reaction with oxidising agents Avoid storage with reducing agents. Avoid strong acids, bases.



X — Must not be stored together

0 — May be stored together with specific preventions

+ — May be stored together

Note: Depending on other risk factors, compatibility assessment based on the table above may not be relevant to storage situations, particularly where large volumes of dangerous goods are stored and handled. Reference should be made to the Safety Data Sheets for each substance or article and risks assessed accordingly.

SECTION 8 Exposure controls / personal protection

Control parameters

- Occupational Exposure Limits (OEL)
- INGREDIENT DATA

Not Available

Emergency Limits

Notes:

Exposure controls

Swan Oxycon On-Line Buffer

TEEL-1	TEEL-2		TEEL-3
30 mg/m3	330 mg/m3		2,000 mg/m3
2.1 mg/m3	23 mg/m3		140 mg/m3
11 mg/m3	120 mg/m3		730 mg/m3
30 mg/m3	330 mg/m3		2,000 mg/m3
Original IDLH		Revised IDLH	
Not Available		Not Available	
Not Available		Not Available	
Occupational Exposure Banding			
Occupational Exposure Band Rating		Occupational Ex	xposure Band Limit
E		≤ 0.01 mg/m³	
	30 mg/m3 2.1 mg/m3 11 mg/m3 30 mg/m3 Original IDLH Not Available Not Available Occupational Exposure Band Rating	30 mg/m3330 mg/m32.1 mg/m323 mg/m311 mg/m3120 mg/m330 mg/m3330 mg/m3Original IDLHNot AvailableNot AvailableOccupational Exposure Band Rating	30 mg/m3 330 mg/m3 2.1 mg/m3 23 mg/m3 11 mg/m3 120 mg/m3 30 mg/m3 330 mg/m3 Revised IDLH Not Available Not Available Not Available Not Available Occupational Exposure Band Rating Occupational Exposure Band Rating

Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to 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 worker and ventilation that strategically "adds" and "removes" air in the work environment.
Individual protection measures, such as personal protective equipment	
Eye and face protection	 Safety glasses with side shields Chemical goggles. 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.
Skin protection	See Hand protection below
Hands/feet protection	The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice. Personal hygiene is a key element of effective hand care. Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.
Body protection	See Other protection below
Other protection	No special equipment needed when handling small quantities. OTHERWISE: • Overalls. • Barrier cream. • Eyewash unit.
Respiratory protection Type -P Filter of sufficient capacity	/. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

city. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent) ent cap

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.

· Try to avoid creating dust conditions.

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance	White solid; soluble in water.		
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 Applicable
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	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available
Heat of Combustion (kJ/g)	Not Available	Ignition Distance (cm)	Not Available
Flame Height (cm)	Not Available	Flame Duration (s)	Not Available
Enclosed Space Ignition Time Equivalent (s/m3)	Not Available	Enclosed Space Ignition Deflagration Density (g/m3)	Not Available

SECTION 10 Stability and reactivity

Reactivity	See section 7	
Chemical stability	roduct is considered stable and 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 is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Not normally a hazard due to non-volatile nature of product		
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 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.		
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 pr animal models); nevertheless exposure by all routes s	oduce chronic effects adverse to the health (as classified by EC Directives using hould be minimised as a matter of course.	
	τοχιςιτγ	IRRITATION	
Swan Oxycon On-Line Buffer	Not Available	Not Available	
	ΤΟΧΙΟΙΤΥ	IRRITATION	
tripotassium citrate monohydrate	dermal (rat) LD50: >2000 mg/kg ^[1]	Eye: no adverse effect observed (not irritating) ^[1]	
mononyulate	Oral (Mouse) LD50; 5400 mg/kg ^[1]	Skin: no adverse effect observed (not irritating) ^[1]	
EDTA disodium salt dihydrate			

	Oral (Mouse) LD50; 2050 mg/kg ^[2]	Eye: no adverse	e effect observed (not irritating) ^[1]	
	Oral (Rat) LD50: 2000 mg/kg ^[2]	Skin: no advers	e effect observed (not irritating) ^[1]	
Legend:	1. Value obtained from Europe ECHA Registered Su specified data extracted from RTECS - Register of T		otained from manufacturer's SDS. Unless otherwise	
TRIPOTASSIUM CITRATE MONOHYDRATE	unintended consequences for ventricular adaptation haemodynamics over a short period, but a detailed f Under normoxic conditions, HIF-1alpha and HIF-2al ubiquitinated, and rapidly degraded. PHD activity be induction of HIF activity. Additionally, the observation that mice with loss of P	Considering that endothelial HIF-1alpha was shown to be critical for left heart adaptation to overload, systemically targeting HIFs might have unintended consequences for ventricular adaptation in pulmonary hypertension (PH). HIF-2 inhibition appeared to improve right ventricular haemodynamics over a short period, but a detailed functional analysis at later time points would be prudent. Under normoxic conditions, HIF-1alpha and HIF-2alpha are hydroxylated by PHD (prolyl hydroxylase domain) proteins (particularly PHD2), ubiquitinated, and rapidly degraded. PHD activity becomes rate limited during hypoxia, allowing accumulation of HIF-1alpha/2alpha and induction of HIF activity. Additionally, the observation that mice with loss of PHD2 developed severe PH should raise a cautionary flag regarding the clinical use of PHD inhibitors, which are currently in development for chronic anemia.		
EDTA DISODIUM SALT DIHYDRATE	The following information refers to contact allergens Contact allergies quickly manifest themselves as con- contact eczema involves a cell-mediated (T lymphoc urticaria, involve antibody-mediated immune reaction Asthma-like symptoms may continue for months or a condition known as reactive airways dysfunction syn compound. Main criteria for diagnosing RADS inclue of persistent asthma-like symptoms within minutes to include a reversible airflow pattern on lung function 1 and the lack of minimal lymphocytic inflammation, w For ethylendiaminetetraacetic acid (EDTA) and its sa EDTA is a strong organic acid, with a high affinity for as lad and mercury), resulting in highly stable chelat inhibit chemical reactions, depending on application EDTA and its salts are expected to be absorbed by t mild skin irritation, and severe eye irritation. The gre metals used and required by the body. NOTE: Substance has been shown to be mutagenic	ntact eczema, more rarely as urticari cytes) immune reaction of the delaye ns. even years after exposure to the mat drome (RADS) which can occur afte de the absence of previous airways of o hours of a documented exposure to tests, moderate to severe bronchial h ithout eosinophilia. alts: r alkaline-earth ions (for example, cai te complexes. The ability of EDTA to the lungs and the gastrointestinal tran-	a or Quincke's oedema. The pathogenesis of d type. Other allergic skin reactions, e.g. contact erial ends. This may be due to a non-allergic r exposure to high levels of highly irritating lisease in a non-atopic individual, with sudden onset o the irritant. Other criteria for diagnosis of RADS hyperreactivity on methacholine challenge testing, cium and magnesium) and heavy-metal ions (such complex is used commercially to either promote or ct; absorption through skin is unlikely. They cause	
	to cellular DNA.	c in at least one assay, or belongs to	a family of chemicals producing damage or change	
TRIPOTASSIUM CITRATE MONOHYDRATE & EDTA DISODIUM SALT DIHYDRATE	to cellular DNA. No significant acute toxicological data identified in lit		a family of chemicals producing damage or change	
MONOHYDRATE & EDTA			a family of chemicals producing damage or change	
MONOHYDRATE & EDTA DISODIUM SALT DIHYDRATE	No significant acute toxicological data identified in lit	terature search.		
MONOHYDRATE & EDTA DISODIUM SALT DIHYDRATE Acute Toxicity	No significant acute toxicological data identified in lit	terature search. Carcinogenicity	×	
MONOHYDRATE & EDTA DISODIUM SALT DIHYDRATE Acute Toxicity Skin Irritation/Corrosion Serious Eye	No significant acute toxicological data identified in lit	terature search. Carcinogenicity Reproductivity	×	

Legend:

SECTION 12 Ecological information

	Endpoint	Test Duration (hr)	Species	Value	Source
Swan Oxycon On-Line Buffer	Not Available	Not Available	Not Available	Not Available	Not Available
tripotassium citrate	Endpoint	Test Duration (hr)	Species	Value	Source
monohydrate	NOEC(ECx)	192h	Algae or other aquatic plants	425mg/l	2
	Endpoint	Test Duration (hr)	Species	Value	Source
EDTA disodium salt dihydrate	EC10(ECx)	24h	Algae or other aquatic plants	11mg/l	4
Legend:			CHA Registered Substances - Ecotoxicological Inform		
		se - Aquatic Toxicity Data 5. ECETOC Incentration Data 8. Vendor Data	Aquatic Hazard Assessment Data 6. NITE (Japan) -	Bioconcentration Data	7. METI

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
EDTA disodium salt dihydrate	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
EDTA disodium salt dihydrate	LOW (LogKOW = -3.8573)

Ingredient	Mobility
EDTA disodium salt dihydrate	LOW (Log KOC = 1046)

SECTION 13 Disposal considerations

Waste treatment methods		
Product / Packaging disposal	 DO NOT allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal. In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. Where in doubt contact the responsible authority. 	

SECTION 14 Transport information

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

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
tripotassium citrate monohydrate	Not Available
EDTA disodium salt dihydrate	Not Available

14.7.3. Transport in bulk in accordance with the IGC Code

Product name	Ship Type
tripotassium citrate monohydrate	Not Available
EDTA disodium salt dihydrate	Not Available

SECTION 15 Regulatory information

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

tripotassium citrate monohydrate is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

EDTA disodium salt dihydrate is found on the following regulatory lists

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4 Australian Inventory of Industrial Chemicals (AIIC)

Additional Regulatory Information

Not Applicable

National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non- Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (EDTA disodium salt dihydrate)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	Yes
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	Yes
Vietnam - NCI	Yes
Russia - FBEPH	Yes

National Inventory	Status
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	23/12/2022		
Initial Date	Date 05/05/2010		
SDS Version Summary			
Version	Date of Update	Sections Updated	

	Update	
6.1	01/11/2019	One-off system update. NOTE: This may or may not change the GHS classification, Identification of the substance / mixture and of the company / undertaking - Supplier Information
7.1	23/12/2022	Classification review due to GHS Revision change.

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.

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
- DNEL: Derived No-Effect Level
- PNEC: Predicted no-effect concentration
- 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

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