



# KYNOCH FERTILIZER

## SAFETY DATA SHEET

### SUPERS (SSP) 8.7% P

Date Issued / Revised Date : 25 September 2022  
New version : 3.0  
Date previously revised : 1 February 2021  
Replaced version : 2.0

Prepared according to: United Nations GHS (Rev 9E) (2021) and SANS 10234:2019  
(This Safety Data Sheet conforms to the requirements set by the Department of Agriculture, Land reform and Rural development of the Republic of South Africa on the 29 March 2022)

## SECTION 1: IDENTIFICATION

### 1.1 GHS<sup>1</sup> product identification

Product Name : **SuperPhosphate**

<sup>1</sup> GHS - Globally Harmonized System of Classification and Labelling of Chemicals

### 1.2 Other means of identification

Description : **SupersPhosphate, Supers 8.7, SSP**

Chemical name : **SuperPhosphate**

CAS Number<sup>2</sup> : **8011-76-5**

EC Number<sup>3</sup> : **232-379-5**

<sup>2</sup> "CAS Number" - CAS Number is a numerical designation for chemicals that is maintained by the Chemical Abstracts Service (CAS) of the American Chemical Society.

<sup>3</sup> "EC Number" - The European Community number (EC number) is a unique identifier that was assigned to substances for regulatory purposes within the European Union by the European Commission.

### 1.3 Recommended use of materials and restrictions on use

Recommended use of material : **Intended to be used as a fertilizer and in fertilizer blends**

Description : **Source of plant nutrients**

Restrictions on use : **None Identified**

### 1.4 Supplier's details

Supplier's details : **1st Floor, ETG House  
62 Weirda Road East  
Sandton  
2196  
Tel no: (011) 317-2000**

### 1.5 Emergency phone number

Emergency phone number : **Dial Triple Zero (000) and ask for fire  
: Ambulance or the Fire department – 10177  
: Spilltech - 086 100 0366**

## SECTION 2: HAZARD IDENTIFICATION

### 2.1 Classification of substance or mixture

Product Defined : **Substance**

#### Summarized Classification

Types of Hazards	Hazard Class	Category/subcategory	H-Statement
Physical Hazards	Not Classified <sup>1</sup>		
Health Hazards	Serious eye damage/eye irritation	Category 1	H318
Environmental Hazards	Not Classified		

Classification according to the United Nations GHS (Rev 9E) (2021) and SANS 10234:2019

<sup>1</sup> "Not Classified" – Data conclusive but not at sufficient levels for classification.

<sup>2</sup> "H-Statement" – Hazard Statement. Full decryption in Section 16

#### Classification by Organization

Organization	Substance	CAS Number	Classification
EPA-NZ	Mono potassium phosphate	7778-77-0	Not Listed
ECHA	Mono potassium phosphate	7778-77-0	Eye Damage 1
ILO (WHO)	Mono potassium phosphate	7778-77-0	Not Listed
AICIS	Mono potassium phosphate	7778-77-0	No Classification

Reference: (European Chemical Agency [ECHA], n.d.) & (Environmental protection agency [EPA]. New Zealand Government, n.d.) & (The Australian Industrial Chemicals Introduction Scheme [AICIS], n.d.) & (International Labour organization [ILO], n.d.)

### 2.2 GHS Label elements, including precautionary statements

Pictogram :



Pictogram Name : **Corrosion**

Signal Word : **Danger**

Hazard Statements : **H318** - **Serious eye damage/eye irritation**

Precautionary Statements : **P264** - **Wash hands [and ...] thoroughly after handling.**

**P265** - **Do not touch eyes.**

**P280** - **Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...**

Reference: (Pubchem, GHS, n.d.)

### 2.3 Other hazards that do not result in classification

Hazards : **Non Specified**

Reference: (European Chemical Agency [ECHA], n.d.) & (Pubchem, search, n.d.)

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

### 3.1 Substance

Common name	: Superphosphate
EC Name	: Superphosphate
Chemical Formula	: $\text{CaH}_4\text{P}_2\text{O}_8$
Molecular Weight	: 236.07 g/mol
Nutrient Content	: 8.7% Phosphate (P)
CAS Number	: 8011-76-5
EC Number	: 232-379-5
Impurities and stabilizers	: N/A <sup>1</sup>

<sup>1</sup> "N/A" – Not available

Reference: (European Chemical Agency [ECHA], n.d.) & (The Australian Industrial Chemicals Introduction Scheme [AICIS], n.d.)

### 3.2 Mixture

Mixture	: Not Applicable
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## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

General information	: In some cases medical attention necessary (see below).
After inhalation	: Remove from source of exposure to dusts. Obtain medical attention if ill effects occur.
After skin contact	: Wash the affected area with soap and water.
After eye contact	: Flush/irrigate eyes with copious amounts of water for at least 10 minutes. Obtain medical attention if eye irritation persists.
After swallowing	: Do not induce vomiting. Rinse mouth and then give water or milk to drink. Obtain medical attention if more than a small quantity has been swallowed.

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

Effects	: Inhalation - Not Listed
	: Ingestion - Not Listed
	: Skin contact - Not Listed
	: Eye contact - Irritating to eyes

Symptoms	: Inhalation	- Adverse symptoms may include the following: coughing wheezing and breathing difficulties.
	: Ingestion	- Adverse symptoms may include the following: stomach pains, nausea or vomiting, diarrhoea
	: Skin contact	- Adverse symptoms may include the following: redness, dryness.
	: Eye contact	- Adverse symptoms may include the following: pain, watering, redness

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

Note to physician	: Inhalation of fire and thermal decomposition gases, containing phosphorous and sulphur oxides, can cause irritation and corrosive effects on the respiratory system. Some lung effects may be delayed.
Specific treatment	: No specific treatment.

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1 Suitable extinguishing medium

Suitable extinguishing agents	: If fertilizer is involved in the Fire, use plenty of water.
Inappropriate extinguishing media	: Extinguishing media not to be used. Do not use chemical extinguishers or foams or attempt to smother the fire with steam or sand.
Notes	: Use fire extinguishing methods suitable to surrounding conditions.

### 5.2 Specific hazards arise from chemical

Warning	: Non specified.
Hazardous Combustion Products	: At very high temperature ( > 1000°C) decomposes to give toxic gases containing phosphorous and sulphur oxides.
Fire hazard	: Non-flammable substance
Explosion hazard	: Not applicable
Reactivity	: None

### 5.3 Special protective action for Fire-Fighters

Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.
	: No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	: Clothing for fire-fighters (including helmets, protective boots, and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment, and emergency procedures

Percussions	: No action shall be taken involving any personal risk or without suitable training.
Equipment	: Safety glasses. Wear protective rubber clothing with splash guard. Wear impervious rubber safety shoes.
Procedure	: Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Provide adequate ventilation. Prevent any contamination of fertilizer by oils or other combustible materials.

<sup>1</sup> PPE – Personal precautions, protective equipment.

### 6.2 Environmental precautions

Environmental	: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
	: Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).
	: Discharge into the environment must be avoided.

### 6.3 Methods and material for containment and cleaning up

Small Spill	: Any spillage of fertilizer should be cleaned up promptly, swept up and placed in a clean labelled open container for safe disposal. Depending on the degree and nature of contamination, dispose of by use as a fertilizer on farm or to an authorised waste facility.
Large Spill	: Any spillage of fertilizer should be cleaned up promptly, swept up and placed in a clean labelled open container for safe disposal. Depending on the degree and nature of contamination, dispose of by use as a fertilizer on farm or to an authorised waste facility. Remarks: Material free from contamination can be used for its original purpose.

### 6.4 Reference to other sections

Section 7	: Information on safe handling.
Section 8	: Information on personal protection equipment.
Section 13	: For disposal information.

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Handling	: Ensure adequate ventilation. Avoid dust formation. Avoid breathing dust.
	: Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Remove contaminated clothing and shoes. Wash clothing before re-using. Avoid contact with skin and eyes.
	: For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

- Storerooms and receptacles : **Ensure high standard of housekeeping in the storage area.**
- One common storage facility : **Locate away from the sources of heat or fire.**  
**On farm, ensure that the fertilizer is not stored near hay, straw, grain, diesel oil, etc.**  
**When stored loose, take particular care to avoid mixing with other fertilizers.**
- Incompatible Material : **Keep away from combustible materials and substances mentioned under Section 10.**
- Handling of product : **Avoid excessive generation of dust.**  
**Avoid contamination by combustible (e.g. diesel oil, grease, etc.) and/or other incompatible materials.**  
**Avoid unnecessary exposure to the atmosphere to prevent moisture pick-up.**  
**When handling the product over long periods use appropriate personal protective equipment, e.g. gloves.**  
**Carefully clean all equipment prior to maintenance and repair.**  
**Do not permit smoking and the use of naked lights in the storage areas.**  
**Restrict stack size (according to local regulations) and keep at least 1m distance around the stacks of bagged products.**
- Room conditions : **Any building used for the storage should be dry and well ventilated.**
- Storage Class : **(TRGS 510): 10 - 13 Other liquids and solids: Non-Combustible Solids**

Reference: (BAUA, 2016)

## 7.3 Specific end use(s)

- Specific end use(s) : **Apart from the uses mentioned in section 1.3 no other specific uses are stipulated**

# SECTION 8: EXPOSURE CONTROL AND PERSONNEL PROTECTION

## 8.1 Control Parameters

	<b>Compound</b>	<b>Cas Number</b>		<b>TWA<sup>1</sup></b>	<b>STEL<sup>2</sup></b>
South African Labour Department	Superphosphate	8011-76-5		Not Listed	Not Listed
International Labour organization (ILO)	Superphosphate	8011-76-5		Not Listed	Not Listed
OCHA	Superphosphate	8011-76-5		10 mg/m <sup>3</sup>	Not Listed

<sup>1</sup> TWA – Long term exposure: Time Weighted Average (8-hour period)

<sup>2</sup> STEL – Short term exposure: Short term exposure limit (15 min period)

Reference: (South African Labour Department, 2021) & (ILO, n.d.) & (OSHA, n.d.)

Routes of exposure	: <b>The substance can be absorbed into the body by ingestion or inhalation.</b>
Inhalation risk	: <b>Not specified</b>
Effects of short-term exposure	: <b>Irritating to eyes</b>
Effects of long-term or repeated exposure	: <b>Not Listed</b>

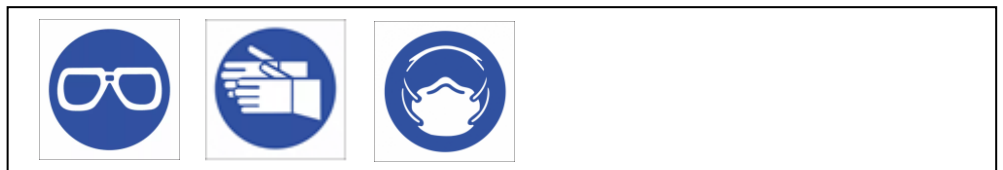
Reference: (ILO, n.d.)

## 8.2 Appropriate engineering controls

Engineering controls	: <b>Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations, and safety showers are close to the workstation location. See Section 7.</b>
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## 8.2 Individual protection measures

Eye/face protection	: <b>Wear safety glasses.</b> Use equipment for eye protection tested and approved under appropriate government standards. SABS adoption: SANS 50166:2018(SA), EN 166(EU) or NIOSH (US).
Skin Protection	: <b>Gloves is recommended.</b> Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Body Protection	: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection	: <b>If ventilation is inadequate, use suitable dust mask.</b> Where protection from nuisance levels of dusts is desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Control of environmental exposure	<b>No special environmental precautions required</b>



# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Properties

Physical state	: <b>Solid</b> <sup>1</sup>
Composition	: <b>Substance</b> <sup>2</sup>
Colour	: <b>Grey</b>
Odour	: <b>Odourless</b>

Melting point/freezing point	: 110 °C
Boiling point or initial boiling point and boiling range	: Not determined
Flammability	: Based on molecular structure and/or experience in handling, it was concluded that the substance is not flammable when coming into contact with an ignition source, with water or with air.
Lower and upper explosion limit/flammability limit	: Not determined
Flash point	: The study does not need to be conducted because the substance is inorganic
Auto-ignition temperature	: Study scientifically not necessary / other information available.
Oxidizing Properties	: Non-Oxidizer
Decomposition temperature	: >100 °C
pH	: The pH of a 10% aqueous suspension is 2.8-2.9.
Kinematic viscosity	: Study technically not feasible
Solubility	: 1 g/l @
Partition coefficient: n-octanol/water (log value)	: The study does not need to be conducted because the substance is inorganic.
Vapour pressure	: 0Pa at 25°C
Density and/or relative density	: 2.41 g/cm <sup>3</sup> @ 20°C
Relative vapour density	: Not Listed
Bulk Density (Volumetric)	: 1,000 - 1,190 kg/m <sup>3</sup>
Particle characteristics	: Manual sieve analysis result: 48.3% by weight is < 2000 µm.
	Laser diffraction analysis result for the < 2000 µm fraction: 10% is < 8.5 µm, 11.247% is < 10.00 µm, 50% is < 160.3 µm, 90% is < 545.48 µm, MMAD= 248.9 µm
Molecular Formula	: CaH <sub>4</sub> P <sub>2</sub> O <sub>8</sub>
Molecular Weight	: 236.07 g/mol

<sup>1</sup> "Solid" – Is a substance that cannot be classified as a liquid or Gas.

<sup>2</sup> "Substance" – Is chemical elements and their compounds in their natural state or obtained by production process)

Reference: (ECHA, n.d.)

## SECTION 10: STABILITY AND REACTIVITY

Reactivity	: Non-Reactive
Chemical stability	: Stable under normal conditions.
Hazardous Reactions	: A dangerous reaction will not occur.



- Conditions to Avoid : Unnecessary exposure to the atmosphere.  
 Strong heat (decomposes).  
 Contamination by incompatible materials.  
 Closeness to sources of heat or fire.  
 Heating under confinement.  
 Welding or hot work on equipment or plant which may have contained fertilizer without first washing thoroughly to remove all fertilizer.
- Incompatible Materials : Alkalies, strong acids, copper, and its alloys.
- Hazardous Decomposition Products : Ammonia is released upon reaction with strong bases or when heated.

## SECTION 11: TOXICOLOGY

### 11.1 Acute Toxicity

- Classification : No Classification
- Description : Two studies are available to assess the acute oral toxicity of potassium dihydrogen orthophosphate in addition a number of supporting data on analogous substances are available to support the conclusion.

Method	Compound	Cas Number	Measure	Value	Subject
Oral	Superphosphate	8011-76-5	LD50 <sup>1</sup>	>2000 mg/kg bw <sup>2</sup>	Rat
Inhalation	Superphosphate	8011-76-5	LC50	> 5 mg/L	Rat
Dermal	Superphosphate	8011-76-5	LD50	>5000 mg/kg bw	Rat

<sup>1</sup> "LD50" – Lethal Doses. The dosage at which 50% mortality was observed.

<sup>2</sup> "bw" - body-weight/day

Reference: (ECHA, n.d.) & (Pubchem, search, n.d.) & (EPA. New Zealand Government, n.d.)

### 11.2 Skin corrosion/irritation

- Classification : No classification
- Description : All tests scored 0 or 1, and is fully reversible within: 72 hours
- Subjects : Rabbit

Reference: (ECHA, n.d.)

### 11.3 Serious eye damage/irritation

- Classification : Eye Damage, Category 1
- Description : Remnants of the test substance were present in the eye of all animals on Day 1.  
 No symptoms of systemic toxicity were observed in the animals during the test period and no mortality occurred.
- Subjects : Rabbits

Reference: (ECHA, n.d.)

## 11.4 Respiratory or skin sensitisation

Classification	: <b>No Classification</b>
Description	: <b>Since there was no indication that the test substance elicits an SI <math>\geq</math> 3 when tested up to 50%, Diammonium hydrogenorthophosphate was considered not to be a skin sensitizer.</b>
Subjects	: <b>Mouse</b>

Reference: (ECHA, n.d.)

## 11.5 Germ cell mutagenicity

Classification	: <b>No classification</b>
Description	: <b>A reliable chromosome aberration study with human lymphocytes exposed to single superphosphate showed no genotoxicity.</b>
Subjects	: <b>Bacteria</b>

Reference: (ECHA, n.d.)

## 11.6 Carcinogenicity

Classification	: <b>No Classification</b>
Description	: <b>Study scientifically not necessary / other information available</b>
Subject	: <b>N/A</b>

Reference: (ECHA, n.d.)

## 11.7 Reproductive toxicity

Classification	: <b>No classification</b>
Description	: <b>No further studies are considered necessary</b>
Subjects	: <b>Rat</b>

Reference: (ECHA, n.d.)

## 11.8 STOT<sup>2</sup> - single exposure

**Not available**

<sup>2</sup> "STOT" - Specific target organ toxicity.

Reference: (ECHA, n.d.) & (Pubchem, search, n.d.)

## 11.9 STOT<sup>2</sup> - repeated exposure

Classification	: <b>No Classification</b>
Description	: <b>Although dermal exposure is likely, dermal absorption is considered to be very low and thus a dermal exposure study would be of limited value. In addition, the vapour pressure is very low and the particle size of the substance has an MMAD of <math>&gt; 200\mu\text{m}</math>, making the possible inhalation exposure negligible (see particle size distribution results), indicating that only very limited inhalation exposure is possible.</b>
Subject	: <b>Rat</b>

<sup>2</sup> "STOT" - Specific target organ toxicity.

Reference: (ECHA, n.d.) & (Pubchem, search, n.d.)

## 11.10 Aspiration hazard

No data available

Reference: (ECHA, n.d.) & (Pubchem, search, n.d.)

## 11.11 Route of Exposure and potential effects

Swallowing	: Not Specified
Inhalation	: Not Specified
Eye exposure	: Irritation
Skin exposure	: Not Specified

Reference: (ECHA, n.d.)

## 11.12 Long- and short-term effects

No data available

Reference: (ECHA, n.d.)

# SECTION 12: ECOLOGICAL INFORMATION

## 12.1 Toxicity

Classification	: Triggers for classification are not met.
Description	: Urea phosphate will dissociate directly into urea and phosphoric acid in aqueous environment.  Considering all data, this shows that urea phosphate is of very low toxicity to aquatic organisms with effect values all above 100 mg/L.

### Aquatic Toxicity

Compound	Cas Number	Organism	Species	Time	Measure	Value
Superphosphate	8011-76-5	Fish	Rainbow trout	96-h	LC50 <sup>1</sup>	>100 mg/L
Superphosphate	8011-76-5	Aquatic invertebrates	Daphnia carinata	72-h	EC50 <sub>1</sub>	1790 mg/L
Superphosphate	8011-76-5	Aquatic invertebrates	Daphnia Magna	48-h	EC50 <sup>1</sup>	>100 mg/L
Superphosphate	8011-76-5	Aquatic Algae and Cyanobacteria	Raphidocelis subcapitata	72-h	EC50	>100 mg/L
Superphosphate	8011-76-5	Micro-organisms	Activated sludge of a predominantly domestic sewage	3-h	EC50	>100 mg/L
Superphosphate	8011-76-5	Aquatic organisms	Dragonfly nymph	96-h	LC50	1133 mg/L

## Terrestrial Toxicity

Compound	Cas Number	Organism	Species	Time	Measure	Value
Superphosphate	8011-76-5	Macro-organisms				Not Tested
Superphosphate	8011-76-5	Arthropods				Not Tested
Superphosphate	8011-76-5	Plant				Not Tested
Superphosphate	8011-76-5	Micro organisms				Not Tested
Superphosphate	8011-76-5	Birds				Not Tested

<sup>1</sup> "LC50 /EC50" - (Median Lethal Concentration/Median Effective Concentration) They are the concentrations at which 50% mortality or inhibition of a function (e.g., growth or growth rate) was observed.

Reference: (ECHA, n.d.) & (Pubchem, search, n.d.)

## 12.2 Persistence and degradability

Stability : **Not Specified**

Biodegradation : **Study scientifically not necessary / other information available**

Reference: (ECHA, n.d.)

## 12.3 Bioaccumulate potential

Description : **Simple inorganic salts which are water soluble will exist in a dissociated form in an aqueous solution. Such a substance has a low potential for bioaccumulation.**

Reference: (ECHA, n.d.)

## 12.4 Mobility in soil

Adsorption : **The study does not need to be conducted because the physicochemical properties of the substance indicate that it can be expected to have a low potential for adsorption.**

Volatilization : **No Data**

Reference: (ECHA, n.d.)

## 12.5 Other adverse effects

Classification : **No data available**

## SECTION 13: DISPOSAL CONSIDERATIONS

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: TRANSPORT INFORMATION

### 12.1 UN Modelled regulations

GHS Classification	:	<b>Not regulated</b>
UN Number	:	<b>Not listed</b>
UN proper shipping name	:	<b>No classification</b>
Transport hazard class(es)	:	<b>No classification</b>
Label	:	<b>No classification</b>
Packing group	:	<b>Not regulated</b>
Environmentally hazardous	:	<b>Not regulated</b>
Special precautions:	:	<b>ADR/RID<sup>1</sup> - Not Specified</b>
		<b>IMDG<sup>2</sup> - Not Specified</b>
		<b>IATA<sup>3</sup> - Not Specified</b>
Transport in Bulk according to IMO instructions	:	<b>Not specified</b>

Reference: (Hazmat Tool. n.d.) & (BAM. 2021)

<sup>1</sup> ADR/RID - International Carriage of Dangerous Goods by Rail (RID) and by Road (ADR)

<sup>2</sup> IMDG - The International Maritime Dangerous Goods (IMDG)

<sup>3</sup> IATA - International Air Transport Association (IATA)

## SECTION 15: REGULATORY INFORMATION

### 15.1 Safety, Health, and environmental regulations specific for the substance or mixture

Regulations	:	<b>This Safety Data Sheet conforms to the requirements set by the Department of Agriculture, Land reform and Rural development of the Republic of South Africa, United Nations GHS (Rev 9E) (2021) and SANS 10234:2019, on the 29 March 2022.</b>
Restrictions	:	<b>The substance is not subjected to any prohibitions or restriction in South Africa.</b>
Chemical Safety Assessment:	:	<b>For this product a chemical safety assessment was not carried out.</b>

## SECTION 16: OTHER INFORMATION

### 16.1 Preparation and revision

#### Latest Version

Version Number	:	<b>Ver. 3</b>
Preparation Date	:	<b>25 August 2022</b>
Where the changes as made	:	<b>Complete overall of all data to comply with GHS regulations</b>

#### Previous Version

Version Number	:	<b>Ver. 2</b>
Preparation date	:	<b>February 2021</b>

## 16.2 Abbreviations and Acronyms

GHS	:	Globally Harmonized System of Classification and Labelling of Chemicals
ECHA	:	European Chemical agency
AICIS	:	The Australian Industrial Chemicals Introduction Scheme
EPA-NZ	:	Environmental protection agency New Zealand
ILO (WHO)	:	International labour organization (World health organization)
CAS Number	:	CAS Number is a numerical designation for chemicals that is maintained by the Chemical Abstracts Service (CAS) of the American Chemical Society.
EC Number	:	The European Community number (EC number) is a unique identifier that was assigned to substances for regulatory purposes within the European Union by the European Commission.
H-Statement	:	Hazard Statement
P-Statement	:	Precautionary Statements
Hazard Statements	:	H319 - Causes serious eye irritation
Precautionary Statements	:	P264 - Wash hands [and ...] thoroughly after handling.
	:	P265 - Do not touch eyes.
	:	P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...
N/A	:	Not Applicable
Not Classified	:	Data conclusive but not at sufficient levels for classification
PPE	:	Personal precautions, protective equipment.
TWA	:	Time Weighted Average
OEL	:	Occupational Exposure Limits
STOT	:	Specific target organ toxicity
LC50 / EC50	:	(Median Lethal Concentration/Median Effective Concentration): They are the concentrations at which 50% mortality or inhibition of a function (e.g., growth or growth rate) was observed.
NOEC	:	(No Observed Effect Concentration) NOEC is the highest tested concentration for which there are no statistically significant difference of effect when compared to the control group
ECx	:	It is the concentrations at which x % (10% for EC10) effect was observed or derived statistically when compared to the control group
LD0	:	Lethal Dose 0, represents the dose at which no individuals are expected to die.
LC0	:	Lethal concentration 0, represents the concentration at which no individuals are expected to die.
LDLo	:	Lethal dose low, is the lowest dosage of a compound that is introduced to the human body or that of an animal by any means apart from inhalation that will cause the death of the individual.

## 16.3 References

**BAM. (2021)** Dangerous Goods Database. Retrieved From <https://www.dgg.bam.de/quickinfo/en/#list>

(The BAM offers with the expert portal TES information and service concerning the transport and packaging of dangerous substances and goods as well as explosives act)

**BAUA. (2016).** Technical Rule for Hazardous Substances. TRGS 510 Storage of hazardous substances in non-stationary containers. Retrieved from <https://www.baua.de/EN/Service/Legislative-texts-and-technical-rules/Rules/TRGS/TRGS-510.html>

(The German Federal Institute for Occupational Safety and Health offers selected publications in English. Baua's research aims to ensure a safe and healthy working environment that is adapted to the needs of humans.)

**Environmental protection agency [EPA]. New Zealand Government. (n.d.)** Database search. *Chemical Classification and Information Database (CCID)*. Retrieved from <https://www.epa.govt.nz/search/>

(EPA-Environmental protection agency. EPA is the government agency responsible for regulating activities that affect Aotearoa New Zealand's environment.)

**European Chemicals Agency [ECHA]. (n.d.)** Information on Chemicals. Retrieved from <https://echa.europa.eu/registration-dossier/-/registered-dossier/15479/1/1>

(ECHA - European Chemicals Agency. The European Chemicals Agency, is an agency of the EU. They implement the EU's chemicals legislation to protect your health and the environment. Their work also contributes to a well-functioning internal market, innovation, and the competitiveness of Europe's chemicals industry.)

**Hazmat Tool. (n.d.)** Load, Transport and Storage of Hazardous Materials according U.S-Hazardous Materials Regulations (49 CFR). <https://www.hazmattool.com/index.php>

(Hazmat Tool is a free to search database with information regarding the 49CRF classification and transport)

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(ILO-International Labour organization. ILO is a specialized agency of the United Nations. The database data was prepared by an international group of experts on behalf of ILO and WHO, with the financial assistance of the European Commission. © ILO and WHO 2021.)

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(The Minister of Employment and Labour has, under section 43 of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), after consultation with the Advisory Council for Occupational Health and Safety, made the regulations in the Schedule)

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(The Australian Industrial Chemicals Introduction Scheme (AICIS) helps protect Australians and the environment by assessing the risks of industrial chemicals and providing information to promote their safe use. Focus mainly on health aspects.)

## 16.4 Disclaimer

The information contained in this SDS does not constitute a risk assessment, and should not replace the user's own assessment of risks as required by other health and safety legislation.

This SDS summarises at the date of issue our best knowledge of the health, safety and environmental hazard information related to the product and in particular how to safely handle, use, store and transport the product. Since Kynoch cannot anticipate or control the conditions under which the product may be handled, used, stored, or transported, each user must, prior to usage, review this SDS in the context of how the user intends to handle, use, store or transport the product and beyond, and communicate such information to all relevant parties.

We shall not assume any liability for the accuracy or completeness of the information contained herein or any advice given unless there has been gross negligence on our part.