SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: Yeald Plus

Other means of identification:

UFI: 6014-KYVD-R108-2CA3

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

Relevant uses: Agricultural Micronutrient. For professional users only.

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

De Sangosse Ltd
Goodwin Business Park
CB8 7SQ Newmarket - Suffolk - United Kingdom
Phone: +44 (0) 1223 811215
msds@desangosse.co.uk
www.desangosse.co.uk

1.4 Emergency telephone number: General Public: Call NHS 111 (24 hours)
Healthcare professionals ONLY: Call UK NPIS 0344 892 0111 (24 hours)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

GB CLP Regulation:

Classification of this product has been carried out in accordance with GB CLP Regulation.

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412
Eye Dam. 1: Serious eye damage, Category 1, H318

2.2 Label elements:

GB CLP Regulation:

Danger

Hazard statements:

Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.
Eye Dam. 1: H318 - Causes serious eye damage.

Precautionary statements:

P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/protective footwear.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER/doctor.
P501: Dispose of the contents and/or its container in line with regulations on dangerous waste or packaging and waste packaging respectively.

Substances that contribute to the classification

Zinc di(acetate); D-Glucopyranose, oligomers, decyl octyl glycosides; Triammonium citrate

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture of substances

Components:

In accordance with Annex II of The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020, the product contains:

- CONTINUED ON NEXT PAGE -

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Identification	Chemical name/Classification	Concentration
CAS: 557-34-6	**Zinc di(acetate)** Acute Tox. 4: H302; Aquatic Chronic 2: H411; Eye Dam. 1: H318 - Danger	**10 - <25 %**
CAS: 6484-52-2	**ammonium nitrate** Eye Irrit. 2: H319; Ox. Sol. 3: H272 - Warning	**2.5 - <10 %**
CAS: 68515-73-1	**D-Glucopyranose, oligomers, decyl octyl glycosides** Eye Dam. 1: H318 - Danger	**2.5 - <10 %**
CAS: 3458-72-8	**Triammonium citrate** Eye Dam. 1: H318 - Danger	**0.025 - <2.5 %**
CAS: 142-71-2	**Copper di(acetate)** Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 2: H411; Eye Dam. 1: H318; Skin Corr. 1B: H314 - Danger	**0.025 - <2.5 %**
CAS: 12280-03-4	**Disodium octaborate · 4H2O** Repr. 1B: H360FD - Danger	**0.025 - <2.5 %**

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

This product does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

By skin contact:

This product is not classified as hazardous when in contact with the skin. However, in case of skin contact it is recommended to remove contaminated clothes and shoes, rinse the skin or if necessary shower the affected person thoroughly with cold water and neutral soap. In case of serious reaction consult a doctor.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

Product is non-flammable under normal conditions of storage, handling and use. Use preferably water.

Unsuitable extinguishing media:

Non-applicable

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

- CONTINUED ON NEXT PAGE -

SECTION 5: FIREFIGHTING MEASURES (continued)

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...).

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and destroy using safe methods (section 6).

B.- Technical recommendations for the prevention of fires and explosions

It is recommended to transfer at a slow speed to avoid the creation of electrostatic charges that could affect flammable products. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Store in a cool, dry, well-ventilated location

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace:

There are no applicable occupational exposure limits for the substances contained in the product

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Zinc di(acetate)	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 557-34-6	Dermal	Non-applicable	Non-applicable	1.338 mg/kg	Non-applicable
EC: 209-170-2	Inhalation	Non-applicable	Non-applicable	4.71 mg/m³	Non-applicable
ammonium nitrate	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 6484-52-2	Dermal	Non-applicable	Non-applicable	5.12 mg/kg	Non-applicable
EC: 229-347-8	Inhalation	Non-applicable	Non-applicable	36 mg/m³	Non-applicable
D-Glucopyranose, oligomers, decyl octyl glycosides	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 68515-73-1	Dermal	Non-applicable	Non-applicable	595000 mg/kg	Non-applicable
EC: 500-220-1	Inhalation	Non-applicable	Non-applicable	420 mg/m³	Non-applicable
Copper di(acetate)	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 142-71-2	Dermal	Non-applicable	Non-applicable	137 mg/kg	Non-applicable
EC: 205-553-3	Inhalation	Non-applicable	Non-applicable	1 mg/m³	1 mg/m³
Disodium octaborate · 4H2O	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 12280-03-4	Dermal	Non-applicable	Non-applicable	326 mg/kg	Non-applicable
EC: 234-541-0	Inhalation	Non-applicable	Non-applicable	6.9 mg/m³	Non-applicable

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Zinc di(acetate)	Oral	Non-applicable	Non-applicable	0.669 mg/kg	Non-applicable
CAS: 557-34-6	Dermal	Non-applicable	Non-applicable	0.669 mg/kg	Non-applicable
EC: 209-170-2	Inhalation	Non-applicable	Non-applicable	1.16 mg/m³	Non-applicable
ammonium nitrate	Oral	Non-applicable	Non-applicable	2.56 mg/kg	Non-applicable
CAS: 6484-52-2	Dermal	Non-applicable	Non-applicable	2.56 mg/kg	Non-applicable
EC: 229-347-8	Inhalation	Non-applicable	Non-applicable	8.9 mg/m³	Non-applicable
D-Glucopyranose, oligomers, decyl octyl glycosides	Oral	Non-applicable	Non-applicable	35.7 mg/kg	Non-applicable
CAS: 68515-73-1	Dermal	Non-applicable	Non-applicable	357000 mg/kg	Non-applicable
EC: 500-220-1	Inhalation	Non-applicable	Non-applicable	124 mg/m³	Non-applicable
Copper di(acetate)	Oral	0.082 mg/kg	Non-applicable	0.041 mg/kg	Non-applicable
CAS: 142-71-2	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 205-553-3	Inhalation	Non-applicable	Non-applicable	Non-applicable	Non-applicable
Disodium octaborate · 4H2O	Oral	0.81 mg/kg	Non-applicable	0.81 mg/kg	Non-applicable
CAS: 12280-03-4	Dermal	Non-applicable	Non-applicable	163.3 mg/kg	Non-applicable
EC: 234-541-0	Inhalation	Non-applicable	Non-applicable	3.5 mg/m³	Non-applicable

PNEC:

Identification				
Zinc di(acetate)	STP	0.009 mg/L	Fresh water	0.002 mg/L
CAS: 557-34-6	Soil	0 mg/kg	Marine water	0 mg/L
EC: 209-170-2	Intermittent	0.021 mg/L	Sediment (Fresh water)	0.008 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.001 mg/kg
ammonium nitrate	STP	18 mg/L	Fresh water	Non-applicable
CAS: 6484-52-2	Soil	Non-applicable	Marine water	Non-applicable
EC: 229-347-8	Intermittent	Non-applicable	Sediment (Fresh water)	Non-applicable
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable
D-Glucopyranose, oligomers, decyl octyl glycosides	STP	560 mg/L	Fresh water	0.176 mg/L
CAS: 68515-73-1	Soil	0.654 mg/kg	Marine water	0.018 mg/L
EC: 500-220-1	Intermittent	0.27 mg/L	Sediment (Fresh water)	1.516 mg/kg
	Oral	0.11111 g/kg	Sediment (Marine water)	0.152 mg/kg

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
Copper di(acetate)	STP	0.23 mg/L	Fresh water	0.0078 mg/L
CAS: 142-71-2	Soil	65 mg/kg	Marine water	0.0052 mg/L
EC: 205-553-3	Intermittent	Non-applicable	Sediment (Fresh water)	87 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	676 mg/kg
Disodium octaborate · 4H2O	STP	10 mg/L	Fresh water	2.9 mg/L
CAS: 12280-03-4	Soil	5.7 mg/kg	Marine water	2.9 mg/L
EC: 234-541-0	Intermittent	13.7 mg/L	Sediment (Fresh water)	Non-applicable
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable

8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<UKCA marking>>. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,…) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

C.- Specific protection for the hands

Pictogram	PPE	Remarks
 Mandatory hand protection	Protective gloves against minor risks	Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420:2004+A1:2010 and EN ISO 374-1:2016+A1:2018

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection

Pictogram	PPE	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Remarks
	Work clothing	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip work shoes	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2012 y EN 13832-1:2007

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 ºC:	Liquid
Appearance:	Not available
Colour:	Green
Odour:	Characteristic
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	100 ºC
Vapour pressure at 20 ºC:	Non-applicable *
Vapour pressure at 50 ºC:	Non-applicable *
Evaporation rate at 20 ºC:	Non-applicable *

Product description:

Density at 20 ºC:	Non-applicable *
Relative density at 20 ºC:	1.16 - 1.22
Dynamic viscosity at 20 ºC:	Non-applicable *
Kinematic viscosity at 20 ºC:	Non-applicable *
Kinematic viscosity at 40 ºC:	Non-applicable *
Concentration:	Non-applicable *
pH:	5.5 - 6.5
Vapour density at 20 ºC:	Non-applicable *
Partition coefficient n-octanol/water 20 ºC:	Non-applicable *
Solubility in water at 20 ºC:	Non-applicable *
Solubility properties:	Completely miscible
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *

Flammability:

Flash Point:	Non Flammable (>60 ºC)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	1010 ºC
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *

Particle characteristics:

Median equivalent diameter:	Non-applicable

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Corrosive to metals:	Non-applicable *
Heat of combustion:	Non-applicable *
Aerosols-total percentage (by mass) of flammable components:	Non-applicable *

Other safety characteristics:

Surface tension at 20 ºC:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Refraction index: Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Precaution	Precaution	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO_2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for skin contact. For more information see section 3.
- Contact with the eyes: Produces serious eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
  IARC: Non-applicable
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
ammonium nitrate CAS: 6484-52-2	LD50 oral	2217 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
Zinc di(acetate) CAS: 557-34-6	LD50 oral	794 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
Copper di(acetate) CAS: 142-71-2	LD50 oral	500 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
Disodium octaborate · 4H2O CAS: 12280-03-4	LD50 oral	2550 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

Acute toxicity:

Identification	Concentration		Species	Genus
Zinc di(acetate) CAS: 557-34-6	LC50	1.54 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	3.7 mg/L (48 h)	N/A	Crustacean
	EC50	2.1 mg/L (72 h)	N/A	Algae
ammonium nitrate CAS: 6484-52-2	LC50	5697 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	Non-applicable		
	EC50	Non-applicable		
D-Glucopyranose, oligomers, decyl octyl glycosides CAS: 68515-73-1	LC50	126 mg/L (96 h)	Brachydanio rerio	Fish
	EC50	151 mg/L (48 h)	Acartia tonsa	Crustacean
	EC50	27 mg/L (72 h)	Scenedesmus subspicatus	Algae
Copper di(acetate) CAS: 142-71-2	LC50	0.2 mg/L (96 h)	Salmo gairdneri	Fish
	EC50	0.05 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		

Chronic toxicity:

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Concentration		Species	Genus
D-Glucopyranose, oligomers, decyl octyl glycosides	NOEC	1.8 mg/L	Danio rerio	Fish
CAS: 68515-73-1	NOEC	2 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
Zinc di(acetate)	BOD5	Non-applicable	Concentration	Non-applicable
CAS: 557-34-6	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	99 %
D-Glucopyranose, oligomers, decyl octyl glycosides	BOD5	Non-applicable	Concentration	Non-applicable
CAS: 68515-73-1	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	100 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
Zinc di(acetate)	BCF	3
CAS: 557-34-6	Pow Log	-1.28
	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
D-Glucopyranose, oligomers, decyl octyl glycosides	Koc	50	Henry	1.2E-8 Pa·m³/mol
CAS: 68515-73-1	Conclusion	Very High	Dry soil	No
	Surface tension	Non-applicable	Moist soil	No

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class
20 01 29*	detergents containing hazardous substances	Dangerous

Type of waste:

HP14 Ecotoxic, HP4 Irritant — skin irritation and eye damage

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance The Waste Regulations 2011, 2011 No. 988. As under 15 01 of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of UK REACH the provisions related to waste management are stated:

UK legislation: The Waste Regulations 2011.

SECTION 14: TRANSPORT INFORMATION

This product is not regulated for transport (ADR/RID,IMDG,IATA)

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SECTION 15: REGULATORY INFORMATION

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

- Substances listed in UK candidate list of substances of very high concern (SVHCs): *Disodium octaborate · 4H2O (12280-03-4)*
- Substances listed in UK REACH Authorisation List (Annex 14): Non-applicable

The Detergents (Amendment) (EU Exit) Regulations:

In accordance with this regulation the product complies with the following:

The tensoactives contained in this mixture comply with the biodegradibility criteria stipulated in The Detergents (Amendment) (EU Exit) Regulations. The information to prove this is available to the relevant authorities of the Member States and will be shown to them by direct request or the request of a detergent manufacturer.

The Control of Major Accident Hazards Regulations 2015:

Non-applicable

Restrictions to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII UK REACH, etc ....):

Content ammonium nitrate. We don't commercialize products whose weight contains more than 28% of nitrogen compaired to ammonium nitrate. We use it as a solid fertilizer, it is a much simpler composite, respecting the 3rd Annex of the EU Reglementation of 2003/2003. As well, we don't commercialize products whose weight contains 16% or more of nitrogen compaired to ammonium nitrate. Our products are destined to intermediate users and distributors, farmers to use in their agricultural activities or to people working in horticulture, green houses cultures, parks protection, gardening or sports' field maintenance, silviculture and other similar activities.
Regulation (EU) 2019/1148 on the marketing and use of explosives precursors: Contains Potassium nitrate, ammonium nitrate. Product under the provisions of Article 9. However, products that contain explosives precursors only to such a small extent and in such complex mixtures that the extraction of the explosives precursors is technically extremely difficult should be excluded from the scope of this Regulation.
Shall not be used in:
—ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
—tricks and jokes,
—games for one or more participants, or any article intended to be used as such, even with ornamental aspects.
Occupational exposure to respirable crystalline silica must be controlled pursuant to Directive (EU) 2019/130.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2020.
Control of Substances Hazardous to Health Regulations 2002 (as amended)
EH40/2005 Workplace exposure limits.
COSHH-SR24 Storing chemical products (small scale).
COSHH-SR2 Diluting chemical concentrates.
COSHH-SR4 Manual cleaning and disinfecting surfaces.
The Product Safety and Metrology etc. (Amendment etc.) (EU Exit) Regulations 2019: SCHEDULE 34 - Amendment of Regulation (EC) No 1223/2009 and related amendments.
The Detergents (Amendment) (EU Exit) Regulations 2020.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.

Texts of the legislative phrases mentioned in section 2:

H318: Causes serious eye damage.
H412: Harmful to aquatic life with long lasting effects.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

GB CLP Regulation:

- CONTINUED ON NEXT PAGE -

SECTION 16: OTHER INFORMATION (continued)

Acute Tox. 4: H302 - Harmful if swallowed.
Aquatic Acute 1: H400 - Very toxic to aquatic life.
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.
Eye Dam. 1: H318 - Causes serious eye damage.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Ox. Sol. 3: H272 - May intensify fire, oxidiser.
Repr. 1B: H360FD - May damage fertility. May damage the unborn child.
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.

Classification procedure:

Eye Dam. 1: Calculation method
Aquatic Chronic 3: Calculation method

Advice related to training:

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

http://echa.europa.eu
http://eur-lex.europa.eu

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
LogPOW: Octanolwater partition coefficient
Koc: Partition coefficient of organic carbon
UFI: unique formula identifier
IARC: International Agency for Research on Cancer

- END OF SAFETY DATA SHEET -