Cal-Form
08667

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

1.1 Product identifier: Cal-Form
08667

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

Relevant uses: Fertilizer. For professional use 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:

RIGBY TAYLOR LTD
1 – 3 Freeman Court Jarman Way
Herts SW8 5HW Royston
Phone.: 01204 677777 -
Fax: 01204 677715
sales@rigbytaylor.com

1.4 Emergency telephone number: 01204 677777

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

CLP Regulation (EC) nº 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) nº 1272/2008.

Acute Tox. 4: Acute toxicity if swallowed, Category 4, H302
Eye Dam. 1: Serious eye damage, Category 1, H318

2.2 Label elements:

CLP Regulation (EC) nº 1272/2008:

Danger

Hazard statements:

Acute Tox. 4: H302 - Harmful if swallowed
Eye Dam. 1: H318 - Causes serious eye damage

Precautionary statements:

P264: Wash thoroughly after use
P270: Do no eat, drink or smoke when using this product
P280: Wear protective gloves/protective clothing/eye protection/face protection
P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P501: Dispose of contents and / or containers in accordance with regulations on hazardous waste or packaging and packaging waste respectively

Substances that contribute to the classification

nitric acid, ammonium calcium salt (CAS: 15245-12-2); D-Glucopyranose, oligomers, decyl octyl glycosides (CAS: 68515-73-1)

2.3 Other hazards:

Non-applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Miscellaneous products

Components:

In accordance with Annex II of Regulation (EC) nº1907/2006 (point 3), the product contains:

- CONTINUED ON NEXT PAGE -

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Identification	Chemical name/Classification		Concentration
CAS: 15245-12-2 EC: 239-289-5 Index: Non-applicable REACH: 01-2119493947-16-XXXX	**nitric acid, ammonium calcium salt**	Self-classified	**30 - <50 %**
	Regulation 1272/2008	Acute Tox. 4: H302; Eye Dam. 1: H318 - Danger	
CAS: 8061-52-7 EC: Non-applicable Index: Non-applicable REACH: Non-applicable	**Lignosulfonic acid, calcium salt**	Self-classified	**10 - <20 %**
	Regulation 1272/2008	Aquatic Chronic 4: H413	
CAS: 68515-73-1 EC: 500-220-1 Index: Non-applicable REACH: 01-2119488530-36-XXXX	**D-Glucopyranose, oligomers, decyl octyl glycosides**	Self-classified	**1 - <3 %**
	Regulation 1272/2008	Eye Dam. 1: H318 - Danger	
CAS: 52-51-7 EC: 200-143-0 Index: 603-085-00-8 REACH: 01-2119980938-15-XXXX	**Bronopol (INN)**	ATP ATP01	**<1 %**
	Regulation 1272/2008	Acute Tox. 4: H302+H312; Aquatic Acute 1: H400; Eye Dam. 1: H318; Skin Irrit. 2: H315; STOT SE 3: H335 - Danger	
CAS: 64-19-7 EC: 200-580-7 Index: 607-002-00-6 REACH: 01-2119475328-30-XXXX	**Acetic acid**	ATP CLP00	**<1 %**
	Regulation 1272/2008	Flam. Liq. 3: H226; Skin Corr. 1A: H314 - Danger	

To obtain more information on the risk of the substances consult sections 8, 11, 12, 15 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 is not classified as hazardous through inhalation,however, it is recommended in case of intoxication symptoms to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms 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 shower the person affected if necessary 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, as 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:

Request medical assistance immediately, showing the SDS of this product. Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. In the case of loss of consciousness do not administrate anything orally unless supervised by a doctor. Rinse out the mouth and throat, as they may have been affected during ingestion. Keep the person affected at rest.

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:

Product is non-flammable under normal conditions of storage, manipulation and use, containing flammable substances. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems. IT IS NOT RECOMMENDED to use tap water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

- CONTINUED ON NEXT PAGE -

SECTION 5: FIREFIGHTING MEASURES (continued)

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:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, 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:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inertization agent. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

6.2 Environmental precautions:

Avoid spillage into an aqueous medium as it contains substances potentially dangerous for this. Contain the product absorbed in hermetically sealed containers. In the case of serious spillage into an aqueous medium notify the relevant authority.

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.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

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

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Avoid projections and pulverizations. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

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

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.:	0 ºC
Maximum Temp.:	40 ºC
Maximum time:	24 Months

B.- General conditions for storage

- CONTINUED ON NEXT PAGE -

SECTION 7: HANDLING AND STORAGE (continued)

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

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the work environment (EH40/2005 Workplace exposure limits):

Identification	Environmental limits		
Acetic acid	WEL (8h)	10 ppm	25 mg/m³
CAS: 64-19-7	WEL (15 min)	15 ppm	37 mg/m³
EC: 200-580-7	Year	2015	

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
nitric acid, ammonium calcium salt	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 15245-12-2	Dermal	Non-applicable	Non-applicable	13.9 mg/kg	Non-applicable
EC: 239-289-5	Inhalation	Non-applicable	Non-applicable	98 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
Bronopol (INN)	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 52-51-7	Dermal	7 mg/kg	Non-applicable	2.3 mg/kg	Non-applicable
EC: 200-143-0	Inhalation	12.3 mg/m³	4.2 mg/m³	4.1 mg/m³	4.2 mg/m³
Acetic acid	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 64-19-7	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 200-580-7	Inhalation	Non-applicable	25 mg/m³	Non-applicable	25 mg/m³

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
nitric acid, ammonium calcium salt	Oral	Non-applicable	Non-applicable	8.33 mg/kg	Non-applicable
CAS: 15245-12-2	Dermal	Non-applicable	Non-applicable	8.33 mg/kg	Non-applicable
EC: 239-289-5	Inhalation	Non-applicable	Non-applicable	25.2 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
Bronopol (INN)	Oral	1.1 mg/kg	Non-applicable	0.35 mg/kg	Non-applicable
CAS: 52-51-7	Dermal	4.2 mg/kg	Non-applicable	1.4 mg/kg	Non-applicable
EC: 200-143-0	Inhalation	3.7 mg/m³	1.3 mg/m³	1.2 mg/m³	1.3 mg/m³
Acetic acid	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 64-19-7	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 200-580-7	Inhalation	Non-applicable	25 mg/m³	Non-applicable	25 mg/m³

PNEC:

Identification				
nitric acid, ammonium calcium salt	STP	18 mg/L	Fresh water	0.45 mg/L
CAS: 15245-12-2	Soil	Non-applicable	Marine water	0.045 mg/L
EC: 239-289-5	Intermittent	4.5 mg/L	Sediment (Fresh water)	Non-applicable
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable

- CONTINUED ON NEXT PAGE -

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
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	0.0176 mg/L
EC: 500-220-1	Intermittent	0.27 mg/L	Sediment (Fresh water)	1.516 mg/kg
	Oral	111.11 g/kg	Sediment (Marine water)	0.152 mg/kg
Bronopol (INN)	STP	0.43 mg/L	Fresh water	0.01 mg/L
CAS: 52-51-7	Soil	0.5 mg/kg	Marine water	0.0008 mg/L
EC: 200-143-0	Intermittent	0.0025 mg/L	Sediment (Fresh water)	0.041 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.00328 mg/kg
Acetic acid	STP	85 mg/L	Fresh water	3.058 mg/L
CAS: 64-19-7	Soil	0.47 mg/kg	Marine water	0.3058 mg/L
EC: 200-580-7	Intermittent	30.58 mg/L	Sediment (Fresh water)	11.36 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	1.136 mg/kg

8.2 Exposure controls:

A.- General security and hygiene measures in the work place

As a preventative measure it is recommended to use basic Personal Protection Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protection 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

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Compulsory use of face mask	Filter mask for particles	CE CAT III	EN 149:2001+A1:2009	Replace when an increase in resistence to breathing is observed.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Protective gloves against minor risks	CE CAT I		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 and EN 374.

D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against liquid splash	CE CAT II	EN 166:2001 EN ISO 4007:2012	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing.

E.- Bodily protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing	CE CAT I		For professional use only.
	Anti-slip work shoes	CE CAT II	EN ISO 20347:2012	None

F.- Additional emergency measures

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2002	 Eyewash stations	DIN 12 899 ISO 3864-1:2002

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

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply): 0 % weight

V.O.C. density at 20 ºC: 0 kg/m³ (0 g/L)

Average carbon number: 2

Average molecular weight: 60.1 g/mol

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:	Characteristic
Colour:	Brown
Odour:	Characteristic

Volatility:

Boiling point at atmospheric pressure:	Non-applicable *
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:	1330 - 1350 kg/m³ (ISO 649-2)
Relative density at 20 ºC:	1.33 - 1.35
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:	6.4 - 8.4 (ASTM D3838-05)
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:	Miscible
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *

Flammability:

Flash Point:	Non Flammable (>60 ºC)

*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)

Autoignition temperature:	Non-applicable *
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *

9.2 Other information:

Surface tension at 20 ºC:	Non-applicable *
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 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	Precaution	Precaution	Not applicable

10.5 Incompatible materials:

Acids	Water	Combustive materials	Combustible materials	Others
Not applicable	Not applicable	Avoid direct impact	Not applicable	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 (CO2), 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 recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

A.- Ingestion:

- Acute toxicity: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.
- Corrosivity/Irritability: 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.

B- Inhalation:

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

C- Contact with the skin and the eyes:

- Contact with the skin: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous 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):

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

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

E- Sensitizing effects:

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

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

Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for inhalation. 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 dangerous 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 dangerous 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 dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
nitric acid, ammonium calcium salt	LD50 oral	300 mg/kg	Rat
CAS: 15245-12-2	LD50 dermal	2000 mg/kg	Rat
EC: 239-289-5	LC50 inhalation	Non-applicable	
Lignosulfonic acid, calcium salt	LD50 oral	>2000 mg/kg	
CAS: 8061-52-7	LD50 dermal	>2000 mg/kg	
EC: Non-applicable	LC50 inhalation	Non-applicable	
D-Glucopyranose, oligomers, decyl octyl glycosides	LD50 oral	5001 mg/kg	Rat
CAS: 68515-73-1	LD50 dermal	>2000 mg/kg	
EC: 500-220-1	LC50 inhalation	Non-applicable	
Bronopol (INN)	LD50 oral	500 mg/kg	Rat
CAS: 52-51-7	LD50 dermal	1600 mg/kg	Rabbit
EC: 200-143-0	LC50 inhalation	Non-applicable	
Acetic acid	LD50 oral	2500 mg/kg	Rat
CAS: 64-19-7	LD50 dermal	>2000 mg/kg	
EC: 200-580-7	LC50 inhalation	2.06 mg/L (4 h)	Rat

SECTION 12: ECOLOGICAL INFORMATION

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

12.1 Toxicity:

Identification	Acute toxicity		Species	Genus
D-Glucopyranose, oligomers, decyl octyl glycosides	LC50	126 mg/L (96 h)	Brachydanio rerio	Fish
CAS: 68515-73-1	EC50	151 mg/L (48 h)	Acartia tonsa	Crustacean
EC: 500-220-1	EC50	27 mg/L (72 h)	Scenedesmus subspicatus	Algae
Bronopol (INN)	LC50	0.1 - 1 mg/L (96 h)		Fish
CAS: 52-51-7	EC50	0.1 - 1 mg/L		Crustacean
EC: 200-143-0	EC50	0.1 - 1 mg/L		Algae

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Species	Genus
Acetic acid	LC50	75 mg/L (96 h)	Lepomis macrochirus	Fish
CAS: 64-19-7	EC50	47 mg/L (24 h)	Daphnia magna	Crustacean
EC: 200-580-7	EC50	Non-applicable		

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
Lignosulfonic acid, calcium salt	BOD5	Non-applicable	Concentration	Non-applicable
CAS: 8061-52-7	COD	Non-applicable	Period	Non-applicable
EC: Non-applicable	BOD5/COD	Non-applicable	% Biodegradable	32 %
D-Glucopyranose, oligomers, decyl octyl glycosides	BOD5	Non-applicable	Concentration	Non-applicable
CAS: 68515-73-1	COD	Non-applicable	Period	28 days
EC: 500-220-1	BOD5/COD	Non-applicable	% Biodegradable	100 %
Bronopol (INN)	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 52-51-7	COD	Non-applicable	Period	28 days
EC: 200-143-0	BOD5/COD	Non-applicable	% Biodegradable	0 %
Acetic acid	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 64-19-7	COD	Non-applicable	Period	14 days
EC: 200-580-7	BOD5/COD	Non-applicable	% Biodegradable	74 %

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
Bronopol (INN)	BCF	0.6
CAS: 52-51-7	Pow Log	-0.64
EC: 200-143-0	Potential	Low
Acetic acid	BCF	3
CAS: 64-19-7	Pow Log	-0.71
EC: 200-580-7	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
EC: 500-220-1	Surface tension	Non-applicable	Moist soil	No
Acetic acid	Koc	Non-applicable	Henry	Non-applicable
CAS: 64-19-7	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 200-580-7	Surface tension	26990 N/m (25 ºC)	Moist soil	Non-applicable

12.5 Results of PBT and vPvB assessment:

Non-applicable

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
06 10 02*	Wastes containing hazardous substances	Dangerous

Type of waste (Regulation (EU) No 1357/2014):

HP4 Irritant — skin irritation and eye damage, HP6 Acute Toxicity

Waste management (disposal and evaluation):

- CONTINUED ON NEXT PAGE -

SECTION 13: DISPOSAL CONSIDERATIONS (continued)

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC, The Waste Regulations 2011, 2011 No. 988). As under 15 01 (2014/955/EU) 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. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) nº1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2015 and RID 2015:

14.1	**UN number:**	Non-applicable
14.2	**UN proper shipping name:**	Non-applicable
14.3	**Transport hazard class(es):**	Non-applicable
	Labels:	Non-applicable
14.4	**Packing group:**	Non-applicable
14.5	**Dangerous for the environment:**	No
14.6	**Special precautions for user**	
	Special regulations:	Non-applicable
	Tunnel restriction code:	Non-applicable
	Physico-Chemical properties:	see section 9
	Limited quantities:	Non-applicable
14.7	**Transport in bulk according to Annex II of Marpol and the IBC Code:**	Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 37-14:

14.1	**UN number:**	Non-applicable
14.2	**UN proper shipping name:**	Non-applicable
14.3	**Transport hazard class(es):**	Non-applicable
	Labels:	Non-applicable
14.4	**Packing group:**	Non-applicable
14.5	**Dangerous for the environment:**	No
14.6	**Special precautions for user**	
	Special regulations:	Non-applicable
	EmS Codes:	
	Physico-Chemical properties:	see section 9
	Limited quantities:	Non-applicable
14.7	**Transport in bulk according to Annex II of Marpol and the IBC Code:**	Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2015:

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SECTION 14: TRANSPORT INFORMATION (continued)

14.1	**UN number:**	Non-applicable
14.2	**UN proper shipping name:**	Non-applicable
14.3	**Transport hazard class(es):**	Non-applicable
	Labels:	Non-applicable
14.4	**Packing group:**	Non-applicable
14.5	**Dangerous for the environment:**	No
14.6	**Special precautions for user**	
	Physico-Chemical properties:	see section 9
14.7	**Transport in bulk according to Annex II of Marpol and the IBC Code:**	Non-applicable

SECTION 15: REGULATORY INFORMATION

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

Regulation (EC) No 528/2012: contains a preservative to protect the initial properties of the treated article. Contains Bronopol (INN).

Candidate substances for authorisation under the Regulation (EC) 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Bronopol (INN) (Product-type 2, 6, 9, 11, 12, 22)

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII, REACH):

Non-applicable

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Other legislation:

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009, 2009 No. 716
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (CDG 2009), SI 2009 No 1348
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment (Amendment) Regulations 2011, 2011 No. 1885
Control of Substances Hazardous to Health Regulations 2002 (as amended)
EH40/2005 Workplace exposure limits
The Waste Regulations 2011, 2011 No. 988

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) Nº 1907/2006 (Regulation (EU) Nº 453/2010, Regulation (EC) Nº 2015/830)

Modifications related to the previous security card which concerns the ways of managing risks. :

COMPOSITION/INFORMATION ON INGREDIENTS:

· Added Content

D-Glucopyranose, oligomers, decyl octyl glycosides (68515-73-1)

Texts of the legislative phrases mentioned in section 2:

H318: Causes serious eye damage
H302: Harmful if swallowed

Texts of the legislative phrases mentioned in section 3:

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SECTION 16: OTHER INFORMATION (continued)

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

CLP Regulation (EC) nº 1272/2008:

Acute Tox. 4: H302 - Harmful if swallowed
Acute Tox. 4: H302+H312 - Harmful if swallowed or in contact with skin
Aquatic Acute 1: H400 - Very toxic to aquatic life
Aquatic Chronic 4: H413 - May cause long lasting harmful effects to aquatic life
Eye Dam. 1: H318 - Causes serious eye damage
Flam. Liq. 3: H226 - Flammable liquid and vapour
Skin Corr. 1A: H314 - Causes severe skin burns and eye damage
Skin Irrit. 2: H315 - Causes skin irritation
STOT SE 3: H335 - May cause respiratory irritation

Classification procedure:

Eye Dam. 1: Calculation method
Acute Tox. 4: Calculation method

Advice related to training:

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

Principal bibliographical sources:

http://esis.jrc.ec.europa.eu
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: 5-day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
CL50: Lethal Concentration 50
EC50: Effective concentration 50
Log-POW: Octanol–water partition coefficient
Koc: Partition coefficient of organic carbon

- END OF SAFETY DATA SHEET -