

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

1.1 Product Identifier Optik Foam Bout Marker

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

Relevant uses: Agricultural Adjuvant. 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

Company: Indigrow Ltd, The Old Bakery, Hyde End Lane, Brimpton, Berkshire, RG7 4RH. UK.
Phone: +44 (0) 1189 710 995
Email: growth@indigrow.com

1.4. Emergency telephone number +44 (0) 7725 962 366

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

Directive 67/548/EC and Directive 1999/45/EC:

This product was classified in accordance with Directive 67/548/EC and Directive 1999/45/EC, adapting the requirements to Regulation (EC) n°1907/2006 (REACH regulation).

Xi: R38 - Irritating to skin, R41 - Risk of serious damage to eyes

Xn: R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed

CLP Regulation (EC) n° 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) n° 1272/2008.

Eye Dam. 1: Serious eye damage, Category 1

Skin Irrit. 2: Skin irritation, Category 2

2.2. Label elements

CLP Regulation (EC) n° 1272/2008:

Danger



Hazard indications: Eye Dam. 1: H318 - Causes serious eye damage
Skin Irrit. 2: H315 - Causes skin irritation

Cautionary advice: P264: Wash thoroughly after use
P280: Wear protective gloves/protective clothing/eye protection/face protection
P302+P352: IF ON SKIN: Wash with plenty of soap and water
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 or doctor/physician
P321: Specific treatment is urgently needed (go to see a doctor with the Safety data sheet for this product)
P332+P313: If skin irritation occurs: Get medical advice/attention
P362: Take off contaminated clothing and wash before reuse

Supplementary information: Non-applicable

Substances that contribute to the classification:

Sulfuric acid, mono-C12-14-alkyl esters, sodium salts; Amines, coco alkyldimethyl, N-oxides; Tetrasodium ethylenediaminetetraacetate

2.3. Other hazards

Non-applicable

Optik

Foam Bout Marker

Material Safety Data Sheet

Issue: 02 - Nov 2014

Indigrow Ltd Safety data sheet according to Regulation (EC) No. 1907/2006. Page 2 of 11

SECTION 3: Composition/Information on Ingredients

Chemical description: Miscellaneous products
 Components: In accordance with Annex II of Regulation (EC) n°1907/2006 (point 3), the product contains:

Identification	Chemical Name/Classification	Concentration
CAS: 85586-07-8 EC: 287-809-4 Index: Non-applicable REACH: 01-2119489463-28-XXXX	Sulfuric acid, mono-C12-14-alkyl esters, sodium salts (Self-classified)	20-<25%
	Directive 67/548/EC Xi: R38, R41; Xn: R22	
	Regulation 1272/2008 Acute Tox. 4: H302; Eye Dam. 1: H318; Skin Irrit. 2: H315 - Danger	
CAS: 111-76-2 EC: 203-905-0 Index: 603-014-00-0 REACH: 01-2119475108-36-XXXX	2-butoxyethanol ATP CLP00	15-<20%
	Directive 67/548/EC Xi: R36/38; Xn: R20/21/22	
	Regulation 1272/2008 Acute Tox. 4: H302+H312+H332; Eye Irrit. 2: H319; Skin Irrit. 2: H315 - Warning	
CAS: 61788-90-7 EC: 263-016-9 Index: Non-applicable REACH: Non-applicable	Amines, coco alkyl dimethyl, N-oxides (Self-classified)	5-<10%
	Directive 67/548/EC Xi: R38, R41	
	Regulation 1272/2008 Eye Dam. 1: H318; Skin Irrit. 2: H315 - Danger	
CAS: 64-02-8 EC: 200-573-9 Index: 607-428-00-2 REACH: 01-2119486762-27-XXXX	Tetrasodium ethylenediaminetetraacetate ATP ATP01	5-<10%
	Directive 67/548/EC Xi: R41; Xn: R22	
	Regulation 1272/2008 Acute Tox. 4: H302; Eye Dam. 1: H318 - Danger	
CAS: 61788-93-0 EC: 263-020-0 Index: Non-applicable REACH: Non-applicable	Amines, coco alkyl dimethyl (Self-classified)	<1%
	Directive 67/548/EC C: R34; N: R50; Xn: R22	
	Regulation 1272/2008 Acute Tox. 4: H302; Aquatic Acute 1: H400; Skin Corr. 1B: H314 - Danger	
CAS: 64-19-7 EC: 200-580-7 Index: 607-002-00-6 REACH: 01-2119475328-30-XXXX	Acetic acid ATP CLP00	<1%
	Directive 67/548/EC C: R35; R10	
	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 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 MSDS of this product.

By inhalation: This product does not contain substances classified as dangerous 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: Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:	Rinse eyes thoroughly with luke warm 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 MSDS of the product.
By consumption:	Do not induce vomiting, but if it does happen keep the head up to avoid inhalation. 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: Fire-Fighting Measures

5.1. Extinguishing media

Product is non-flammable under normal conditions of storage, manipulation and use. 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

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

5.3. Advice for fire-fighters

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 spilled product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inertizing 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

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

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.

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.

Technical recommendations to prevent ergonomic and toxicological risks:

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

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

Technical measures for storage: Minimum Temp.: 0°C
 Maximum Temp.: 40°C
 Maximum time: 24 Months

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

8.1. Control parameters

Substances whose occupational exposure limits have to be monitored in the work environment

Identification	Environmental limits		
	IOELV (8h)	20 ppm	98 mg/m ³
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	IOELV (STEL)	50 ppm	246 mg/m ³
	Year	2014	
	IOELV (8h)	10 ppm	25 mg/m ³
Acetic acid CAS: 64-19-7 EC: 200-580-7	IOELV (STEL)		
	Year	2014	

Optik

Foam Bout Marker

Material Safety Data Sheet

Issue: 02 - Nov 2014

Indigrow Ltd Safety data sheet according to Regulation (EC) No. 1907/2006. Page 5 of 11

DNEL (Workers):

Identification		Short Exposure		Long Exposure	
		Systemic	Local	Systemic	Local
Sulfuric acid, mono-C12-14-alkyl esters, sodium salts CAS: 85586-07-8 EC: 287-809-4	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	4060 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	285 mg/m ³	Non-applicable
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	89 mg/kg	Non-applicable	75 mg/kg	Non-applicable
	Inhalation	663 mg/m ³	246 mg/m ³	98 mg/m ³	Non-applicable
Tetrasodium ethylenediaminetetraacetate CAS: 64-02-8 EC: 200-573-9	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	2080 mg/kg	Non-applicable
	Inhalation	2.5 mg/m ³	2.5 mg/m ³	294 mg/m ³	Non-applicable
Acetic acid CAS: 64-19-7 EC: 200-580-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	25 mg/m ³	Non-applicable	25 mg/m ³

DNEL (Population):

Identification		Short Exposure		Long Exposure	
		Systemic	Local	Systemic	Local
Sulfuric acid, mono-C12-14-alkyl esters, sodium salts CAS: 85586-07-8 EC: 287-809-4	Oral	Non-applicable	Non-applicable	24 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	2440 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	85 mg/m ³	Non-applicable
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	Oral	13.4 mg/kg	Non-applicable	3.2 mg/kg	Non-applicable
	Dermal	44.5 mg/kg	Non-applicable	38 mg/kg	Non-applicable
	Inhalation	426 mg/m ³	123 mg/m ³	49 mg/m ³	Non-applicable
Tetrasodium ethylenediaminetetraacetate CAS: 64-02-8 EC: 200-573-9	Oral	Non-applicable	Non-applicable	25 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	1.5 mg/m ³	1.5 mg/m ³	Non-applicable	Non-applicable
Acetic acid CAS: 64-19-7 EC: 200-580-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	25 mg/m ³	Non-applicable	25 mg/m ³

Optik

Foam Bout Marker

Material Safety Data Sheet

Issue: 02 - Nov 2014

Indigrow Ltd Safety data sheet according to Regulation (EC) No. 1907/2006. Page 6 of 11

PNEC:

Identification				
Sulfuric acid, mono-C12-14-alkyl esters, sodium salts CAS: 85586-07-8 EC: 287-809-4	STP	1084 mg/L	Fresh water	0.102 mg/L
	Soil	0.654 mg/kg	Marine water	0.01 mg/L
	Intermittent	0.036 mg/L	Sediment (Fresh water)	3.58 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.358 mg/kg
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	STP	463 mg/L	Fresh water	8.8 mg/L
	Soil	3.13 mg/kg	Marine water	0.88 mg/L
	Intermittent	9.1 mg/L	Sediment (Fresh water)	34.6 mg/kg
	Oral	20 g/kg	Sediment (Marine water)	Non-applicable
Tetrasodium ethylenediaminetetraacetate CAS: 64-02-8 EC: 200-573-9	STP	43 mg/L	Fresh water	2.2 mg/L
	Soil	0.72 mg/kg	Marine water	0.22 mg/L
	Intermittent	1.2 mg/L	Sediment (Fresh water)	Non-applicable
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable
Acetic acid CAS: 64-19-7 EC: 200-580-7	STP	85 mg/L	Fresh water	3.058 mg/L
	Soil	0.47 mg/kg	Marine water	0.3058 mg/L
	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

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.

Respiratory protection:	PPE:	Filter mask for particles
	Labelling:	CE CAT III
	CEN Standard:	EN 149:2001+A1:2009
	Remarks:	Replace when an increase in resistance to breathing is observed.
Specific protection for the hands:	PPE:	Chemical protective gloves
	Labelling:	CE CAT I
	CEN Standard:	EN 374-1:2003; EN 374-3:2003/AC:2006; EN 420:2003+A1:2009
	Remarks:	Replace the gloves at any sign of deterioration.
Ocular and facial protection:	PPE:	Panoramic glasses against liquid splash
	Labelling:	CE CAT II
	CEN Standard:	EN 166:2001; EN 172:1994/A1:2000; EN 172:1994/A2:2001; EN 165:2005
	Remarks:	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.
Bodily protection:	PPE:	Work clothing
	Labelling:	CE CAT I
	CEN Standard:	EN 340:2003
	Remarks:	For professional use only.
	PPE:	Anti-slip work shoes
	Labelling:	CE CAT II
	CEN Standard:	EN ISO 20347:2004/A1:2007; EN ISO 20344:2011
	Remarks:	None



Optik

Foam Bout Marker

Material Safety Data Sheet

Issue: 02 - Nov 2014

Indigrow Ltd Safety data sheet according to Regulation (EC) No. 1907/2006. Page 7 of 11

Additional emergency measures:	Emergency measure: Standards:	Emergency shower ANSI Z358-1; ISO 3864-1:2002
	Emergency measure: Standards:	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.	

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance:	Physical state at 20 °C:	Liquid
	Appearance:	Colourless
	Colour:	Colourless
	Odor:	Characteristic
Product description:	Density at 20°C:	1022 - 1042 kg/m ³ (ISO 649-2)
	Relative density at 20°C:	1.022 - 1.042
	pH:	10-12
	Solubility property:	Miscible
Flammability:	Flash Point:	Non Flammable (>60°C)

9.2. Other information

Surface tension at 20 °C:	Non-applicable
Refraction index:	Non-applicable

SECTION 10: Stability and Reactivity

10.1. Reactivity

No hazardous reactions are expected if the following technical instructions storage of chemicals. 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 excessive temperatures or pressure are not expected.

10.4. Conditions to avoid

Applicable for handling and storage at room temperature:

Shock and friction:	Not applicable
Contact with air:	Not applicable
Increase in temperature:	Precaution
Sunlight:	Avoid direct impact
Humidity:	Not applicable

10.5. Incompatible materials

Acids:	Not applicable
Water:	Not applicable
Combustive materials:	Avoid direct impact
Combustible materials:	Avoid direct impact
OtherS:	Not applicable

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

No experimental information is available on the product itself in relation to the toxicological properties. When performing the danger classification on corrosive or irritant effects the recommendations included in section 3.2.5 of Annex VI of Directive 67/548/EC, in paragraphs b) and c) of section 3 of article 6 of Directive 1999/45/EC and in section 3.2.3.3.5. of Annex I of CLP Regulation were taken into account.

Contains glycols. With possibility of effects that are hazardous to the health, it is recommended not to breathe the vapours for long periods of time.

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.
Ingestion:	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.
Inhalation:	Based on available data, the classification criteria are not met
Contact with the skin and the eyes:	Produces serious eye damage after contact.
CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):	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.
Sensitizing effects:	Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensibilizing effects. For more information see section 3.
Specific target organ toxicity (STOT)-time 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.
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.
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.

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
	LD50 oral	LD50 dermal	
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	1300 mg/kg		Rat
		2000 mg/kg	Rat
	450 MG/L (4 h)		Rat
Sulfuric acid, mono-C12-14-alkyl esters, sodium salts CAS: 85586-07-8 EC: 287-809-4	1800 mg/kg		Rat
		Non-applicable	
		Non-applicable	
Tetrasodium ethylenediaminetetraacetate CAS: 64-02-8 EC: 200-573-9	1700 mg/kg		Rat
		Non-applicable	
		Non-applicable	

Optik

Foam Bout Marker

Material Safety Data Sheet

Issue: 02 - Nov 2014

Indigrow Ltd Safety data sheet according to Regulation (EC) No. 1907/2006. Page 9 of 11

SECTION 12: Ecological Information

12.1. Toxicity

Identification	Acute toxicity		Specie	Genus
	LC50			
Sulfuric acid, mono-C12-14-alkyl esters, sodium salts CAS: 85586-07-8 EC: 287-809-4	LC50	3.6 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	4.7 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	12 mg/L (72 h)	Desmodesmus subspicatus	Alga
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	LC50	1490 mg/L (96 h)	Lepomis macrochirus	Fish
	EC50	1815 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	911 mg/L (72 h)	Pseudokirchneriella subcapitata	Alga
Tetrasodium ethylenediaminetetraacetate CAS: 64-02-8 EC: 200-573-9	LC50	121 mg/L (96 h)	Lepomis macrochirus	Fish
	EC50	140 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
Amines, coco alkyldimethyl CAS: 61788-93-0 EC: 263-020-0	LC50	0.1 - 1 mg/L (96 h)		Fish
	EC50	0.1 - 1 mg/L		Crustacean
	EC50	0.1 - 1 mg/L		Alga
Acetic acid CAS: 64-19-7 EC: 200-580-7	LC50	75 mg/L (96 h)	Lepomis macrochirus	Fish
	EC50	47 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		

12.2. Persistence and degradability

Identification	Degradability		Biodegradability	
Sulfuric acid, mono-C12-14-alkyl esters, sodium salts CAS: 85586-07-8 EC: 287-809-4	BOD5	Non-applicable	Concentration	15 mg/L
	Code	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	98%
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	BOD5	0.71g O2/g	Concentration	100 mg/L
	Code	2.2g O2/g	Period	14 days
	BOD5/COD	0.32	% Biodegradable	96%
Acetic acid CAS: 64-19-7 EC: 200-580-7	BOD5	Non-applicable	Concentration	100 mg/L
	Code	Non-applicable	Period	14 days
	BOD5/COD	Non-applicable	% Biodegradable	74%

12.3. Bioaccumulative potential

Identification	Biodegradability	
	Sulfuric acid, mono-C12-14-alkyl esters, sodium salts CAS: 85586-07-8 EC: 287-809-4	BCF
	Pow Log	0.78
	Potential	Low
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	BCF	3
	Pow Log	0.83
	Potential	Low
Tetrasodium ethylenediaminetetraacetate CAS: 64-02-8 EC: 200-573-9	BCF	2
	Pow Log	-13
	Potential	Low
Acetic acid CAS: 64-19-7 EC: 200-580-7	BCF	3
	Pow Log	-0.71
	Potential	Low

12.4. Mobility in soil

Identification	Acute toxicity		Volatility	
	Sulfuric acid, mono-C12-14-alkyl esters, sodium salts CAS: 85586-07-8 EC: 287-809-4	Koc	350	Henry
	Conclusion	Moderate	Dry Soil	Non-applicable
	Surface Tension	29900 N/m (23 °C)	Moist Soil	Non-applicable
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	Koc	8	Henry	1.621E-1 Pa·m ³ /mol
	Conclusion	Very High	Dry Soil	No
	Surface Tension	27290 N/m (25 °C)	Moist Soil	Yed
Tetrasodium ethylenediaminetetraacetate CAS: 64-02-8 EC: 200-573-9	Koc	1046	Henry	0E+0 Pa·m ³ /mol
	Conclusion	Low	Dry Soil	No
	Surface Tension	Non-applicable	Moist Soil	No
Acetic acid CAS: 64-19-7 EC: 200-580-7	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry Soil	Non-applicable
	Surface Tension	26990 N/m (25 °C)	Moist Soil	Non-applicable

12.5. Results of PBT and vPvB assessment

Not available

12.6. Other adverse effects

Not described

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Code	Description	Waste class (Directive 2008/98/EC)
02 01 08*	Agrochemical waste containing dangerous substances	Dangerous

Optik

Foam Bout Marker

Material Safety Data Sheet

Issue: 02 - Nov 2014

Indigrow Ltd Safety data sheet according to Regulation (EC) No. 1907/2006. Page 11 of 11

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2000/532/EC) 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) n°1907/2006 (REACH) the community or state provisions related to waste management are stated.

Community legislation:

Directive 2008/98/EC, 2000/532/EC: Commission Decision of 3 May 2000

SECTION 14: Transport Information

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

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

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

Non-applicable

Active substances for which a decision of non-inclusion onto Annex I (Regulation (EU) No 528/2012):

Non-applicable

Regulation (EC) 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:

Non-applicable

15.2. Chemical Safety Assessment

The supplier has not carried out evaluation of chemical safety.

16. OTHER INFORMATION

The information contained herein relates only to the designated formulation and may not be valid if product is used in combination with other substances. The information is to the best of our knowledge, belief and understanding, true, accurate and reliable at the date of issue. However, the information may neither be exhaustive or complete, and no warranty, guarantee or liability concerning the accuracy or completeness of the information is expressed or implied. It is the user's risk and sole responsibility to verify and satisfy their own criteria and duty of care concerning the validity of the information in relation to their application of the product.

ISSUE 2 11/14 GCL