

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

1.1 Product Identifier Magnum CO

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

Relevant uses: Wetting agent. For professional use only.

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:

In accordance with Directive 67/548/EC and Directive 1999/45/EC, the product is not classified as dangerous.

2.2. Label elements

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

In accordance with the legislation, the elements on the label are as follows: Not classified as dangerous. Safety data sheet available to professional users that request it.





2.3. Other hazards

Non-applicable





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: 27306-78-1 EC: Non-applicable Index: Non-applicable REACH: Non-applicable	Poly(oxy-1,2-ethanediyl), amethyl- w-[3-[1,3,3,3- tetramethyl-1- [(trimethylsilyl)oxy]disiloxanyl] propoxy] (Self-classified)	1-<2.5%
	Directive 67/548/EC N: R51/53; Xi: R36; Xn: R20 	
	Regulation 1272/2008 Acute Tox. 4: H332; Aquatic Chronic 2: H411; Eye Irrit. 2: H319 - Warning 	
CAS: 68131-39-5 EC: 500-195-7 Index: Non-applicable REACH: 01- 2119488720-33-XXXX	Alcohols, C12-15, ethoxylated (C12-15 PARETH-7) (Self-classified)	1-<2.5%
	Directive 67/548/EC Xi: R41; Xn: R22 	
	Regulation 1272/2008 Acute Tox. 4: H302; Eye Dam. 1: H318 - Danger 	

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Identification	Chemical Name/Classification		Concentration
CAS: 52-51-7 EC: 200-143-0 Index: 603-085-00-8 REACH: 01-2119980938-15-XXXX	Bronopol (INN) (ATP ATP01)		<1%
	Directive 67/548/EC	N: R50; Xi: R37/38, R41; Xn: R21/22 	
	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%
	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 is not classified as dangerous 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 dangerous 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 water for at least 15 minutes. 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, 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

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

High risk of slipping due to leakage/spillage of product.

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 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 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

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		
Acetic Acid	IOELV (8h)	10 ppm	25 mg/m ³
CAS: 64-19-7	IOELV (STEL)		
EC: 200-580-7	Year	2012	

DNEL (Workers):

Identification		Short Exposure		Long Exposure	
		Systemic	Local	Systemic	Local
Alcohols, C12-15, ethoxylated (C12-15 PARETH-7) CAS: 68131-39-5 EC: 500-195-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	2080 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	294 mg/m ³	Non-applicable
Bronopol (INN) CAS: 52-51-7 EC: 200-143-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	7 mg/kg	Non-applicable	2.3 mg/kg	Non-applicable
	Inhalation	12.3 mg/m ³	4.2 mg/m ³	4.1 mg/m ³	4.2 mg/m ³
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
Alcohols, C12-15, ethoxylated (C12-15 PARETH-7) CAS: 68131-39-5 EC: 500-195-7	Oral	Non-applicable	Non-applicable	25 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1250 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	87 mg/m ³	Non-applicable
Bronopol (INN) CAS: 52-51-7 EC: 200-143-0	Oral	1.1 mg/kg	Non-applicable	0.35 mg/kg	Non-applicable
	Dermal	4.2 mg/kg	Non-applicable	1.4 mg/kg	Non-applicable
	Inhalation	3.7 mg/m ³	1.3 mg/m ³	1.2 mg/m ³	1.3 mg/m ³
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

PNEC:

Identification				
Alcohols, C12-15, ethoxylated (C12-15 PARETH-7) CAS: 68131-39-5 EC: 500-195-7	STP	10000 mg/L	Fresh Water	0.0446 mg/L
	Soil	1 mg/kg	Marine Water	0.0446 mg/L
	Intermittent	0.0446 mg/L	Sediment (Fresh Water)	41.3 mg/kg
	Oral	Non-applicable	Sediment (Marine Water)	41.3 mg/kg
Bronopol (INN) CAS: 52-51-7 EC: 200-143-0	STP	0.43 mg/L	Fresh Water	0.01 mg/L
	Soil	0.5 mg/kg	Marine Water	0.0008 mg/L
	Intermittent	0.0025 mg/L	Sediment (Fresh Water)	0.041 mg/kg
	Oral	Non-applicable	Sediment (Marine Water)	0.00328 mg/kg
Acetic acid CAS: 64-19-7 EC: 200-580-7	STP	85 mg/L	Fresh Water	3.025 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:	The use of protection equipment will be necessary if a mist forms or if the professional exposure limits are exceeded.
Specific protection for the hands:	Non-applicable
Ocular and facial protection:	Non-applicable
Bodily protection:	Non-applicable
Additional emergency measures:	It is not necessary to take additional emergency measures.
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:	Characteristic
	Colour:	White
	Odor:	Characteristic
Product description:	Density at 20°C:	1020 - 1040 kg/m ³
	Relative density at 20°C:	1.02 - 1.04
	pH:	7.0
	Solubility property:	Miscible
Flammability:	Flash Point:	Non Flammable (>60°C)

9.2. Other information

Surface tension at 20 °C:	Non-applicable
Refraction index:	14-18

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

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.
Ingestion:	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.
Inhalation:	Based on available data, the classification criteria are not met
Contact with the skin and the eyes:	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.
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
	Bronopol (INN) CAS: 52-51-7 EC: 200-143-0	LD50 oral	
	LD50 dermal	1600 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	

SECTION 12: Ecological Information

12.1. Toxicity

Identification	Acute toxicity		Specie	Genus
	Poly(oxy-1,2-ethanediyl), amethyl- w-[3-[1,3,3,3- tetramethyl-1- [(trimethylsilyl)oxy]disiloxanyl] propoxy] CAS: 27306-78-1 EC: Non-applicable	LC50		
EC50		1 - 10 mg/L (48 h)		Crustacean
EC50		1 - 10 mg/L (72 h)		Alga
Bronopol (INN) CAS: 52-51-7 EC: 200-143-0	LC50	0.1 - 1 mg/L (96 h)		Fish
	EC50	0.1 - 1 mg/L (48 h)		Crustacean
	EC50	0.1 - 1 mg/L (72 h)		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	
	Bronopol (INN) CAS: 52-51-7 EC: 200-143-0	BOD5	Non-applicable	Concentration
Code		Non-applicable	Period	28 days
BOD5/COD		Non-applicable	% Biodegradable	0%
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	Bioaccumulation potential	
	Bronopol (INN) CAS: 52-51-7 EC: 200-143-0	BCF
Pow Log		-0.64
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	Absorption/desorption		Volatility	
	Acetic acid CAS: 64-19-7 EC: 200-580-7	Koc	Non-applicable	Henry
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)
-	It is not possible to assign a specific code, as it depends on the intended use by the user	Dangerous

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 recommend 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): Bronopol (INN) (excluded for the product type 1, 3, 4, 7, 10, 13)



Magnum CO

Material Safety Data Sheet

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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.

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.

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