

SAFETY DATA SHEET OPTIMUM BACTI-BLUE

SECTION 1: Identification of t	he substance/mixture and of the company/undertaking			
1.1. Product identifier				
Product name	OPTIMUM BACTI-BLUE			
Product number	OPTK31			
1.2. Relevant identified uses of	1.2. Relevant identified uses of the substance or mixture and uses advised against			
Identified uses	Detergent/Disinfectant. Bactericidal Sink and Surface Detergent. For professional use only. Disinfectants must be used responsibly in line with manufacturer's instructions.			
Uses advised against	Not for direct contact with Food or Beverage stuffs. Not for oral consumption.			
1.3. Details of the supplier of the safety data sheet				
Supplier	UK - Holchem Laboratories Ltd. Gateway House, Pilsworth Road, Bury, BL9 8RD Tel : +44 (0) 1706 222288; e-mail info@holchem.co.uk EU - Kersia Deutschland GmbH, Marie-Curie-Straße 23 53332 Bornheim - Sechtem			
1.4. Emergency telephone nu	mber			
Emergency telephone	Emergency Information:- For accidents and spillages involving this product that pose a threat to the environment, or human health, or require immediate first aid advice call:- +44(0) 1865 407333. Note:- This number will not accept order queries or calls dealing with equipment breakdowns. This product is registered with the NPIS. UK Environment Agency 24hour Advisory Service 0800 807060. Irish Environmental Protection Agency 1890 335599 (This is a Lo Call Number)			
SECTION 2: Hazards identification				
2.1. Classification of the subst	ance or mixture			
Classification (EC 1272/2008)				
Physical hazards	Not Classified			
Health hazards	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319			
Environmental hazards	Aquatic Acute 1 - H400 Aquatic Chronic 3 - H412			
2.2. Label elements				
Hazard pictograms				
Signal word	Warning			

Hazard statements

H315 Causes skin irritation.H319 Causes serious eye irritation.H400 Very toxic to aquatic life.H412 Harmful to aquatic life with long lasting effects.

Precautionary statements	 P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P302+P352 IF ON SKIN: Wash with plenty of 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. P313 Get medical advice/ attention. P501 Dispose of contents/ container in accordance with national regulations.
Detergent labelling	< 5% amphoteric surfactants, < 5% cationic surfactants, < 5% EDTA and salts thereof, < 5% non-ionic surfactants

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

3.2. Mixtures

ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM SALT			1<5%
CAS number: 64-02-8	EC number: 200-573-9	REACH registration number: 01- 2119486762-27	
Classification			
Met. Corr. 1 - H290			
Acute Tox. 4 - H302			
Acute Tox. 4 - H332			
Eye Dam. 1 - H318			
STOT RE 2 - H373			
ALKYL BENZYL DIMETHYL AMMONIUM CHLORIDE		1-2%	
CAS number: 68424-85-1	EC number: 270-325-2		
M factor (Acute) = 10	M factor (Chronic) = 1		
Classification			
Met. Corr. 1 - H290			
Acute Tox. 4 - H302			
Skin Corr. 1B - H314			
Eye Dam. 1 - H318			
Aquatic Acute 1 - H400			
Aquatic Chronic 1 - H410			

DIDECYL DIMETHYL AMM	ONIUM CHLORIDE	<1%
CAS number: 7173-51-5	EC number: 230-525-2	
M factor (Acute) = 10		
Classification		
Met. Corr. 1 - H290		
Acute Tox. 4 - H302		
Skin Corr. 1B - H314		
Eye Dam. 1 - H318		
Aquatic Acute 1 - H400		
Aquatic Chronic 2 - H411		
SODIUM HYDROXIDE		<1%
CAS number: 1310-73-2	EC number: 215-185-5	REACH registration number: 01- 2119457892-27
Classification		
Met. Corr. 1 - H290		
Skin Corr. 1A - H314		
Eye Dam. 1 - H318		
The full text for all hazard sta	tements is displayed in Section 16.	
Composition comments	The Biocidally Active components of this product are supported in the Biocidal Products Regulation.	
SECTION 4: First aid measu	res	
4.1. Description of first aid me	easures	
General information	When it is safe to do so, remove victim imme consideration should be given as to whether immediate First Aid advice in the UK, dial 11	moving the victim will cause further injury. For
Inhalation	•	tamination. Move affected person to fresh air and able for breathing. If breathing stops, provide any discomfort continues.
Ingestion	-	ghly with water. Place unconscious person on the athing can take place. Get medical attention.
Skin contact		uck to the skin. Flush area with clean water. et medical attention if any discomfort continues.
Eye contact	Remove any contact lenses and open eyelid water. Continue to rinse for at least 15 minut	ds wide apart. Rinse immediately with plenty of tes and get medical attention.
4.2. Most important symptom	s and effects, both acute and delayed	
General information	Neat product may cause irritation to skin and irritation to skin. Contact of dilute chemical v	d eyes. Dilute chemical may result in mild with eyes should still be treated as outlined above
Inhalation	Unlikely route of exposure. Inhalation of spra mouth and nose.	ayed droplets may result in soreness of the throa
Ingestion	Unlikely route of exposure without deliberate	abuse. If post chemical is indested irritation of

Skin contact	Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. Chemical burns are possible after prolonged contact. Use solutions may cause mild irritation, especially to open cuts and abrasions.
Eye contact	May result in permanent eye damage.
4.3. Indication of any immedia	te medical attention and special treatment needed
Notes for the doctor	Contains a blend of Chelating agents, Surfactants and Cationic Biocides in aqueous solution. Rinse well with water to neutral pH.
SECTION 5: Firefighting measurements	sures
5.1. Extinguishing media	
Suitable extinguishing media	The product is non-combustible. Use fire-extinguishing media suitable for the surrounding fire.
5.2. Special hazards arising fr	om the substance or mixture
Specific hazards	No unusual fire or explosion hazards noted. The product is non-combustible. On heating irritating fumes may be formed.
5.3. Advice for firefighters	
Protective actions during firefighting	Protective clothing and respiratory protection should be worn when tackling fires involving this product. Control run-off water by containing and keeping it out of sewers and watercourses.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
SECTION 6: Accidental release	se measures
6.1. Personal precautions, pro	otective equipment and emergency procedures
Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet.
6.2. Environmental precaution	<u>is</u>
Environmental precautions	Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body. Avoid or minimise the creation of any environmental contamination.
6.3. Methods and material for	containment and cleaning up
Methods for cleaning up	Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into
	containers. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.
6.4. Reference to other sectio	waste disposal, see Section 13. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.
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Reference to other sections SECTION 7: Handling and sto	waste disposal, see Section 13. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. ns See sections 8,12 & 13 prage
Reference to other sections SECTION 7: Handling and sto 7.1. Precautions for safe hand Usage precautions	waste disposal, see Section 13. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. ns See sections 8,12 & 13 prage <u>lling</u> Wear suitable protective equipment for prolonged exposure and/or high concentrations of
Reference to other sections SECTION 7: Handling and sto 7.1. Precautions for safe hand Usage precautions	waste disposal, see Section 13. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. ns See sections 8,12 & 13 prage Iling Wear suitable protective equipment for prolonged exposure and/or high concentrations of vapours, spray or mist. Read and follow manufacturer's recommendations.

Specific end use(s)	Detergent/Disinfectant. Refer to Product Data sheet.	
Usage description	This product is suitable for cleaning food process plants, it is not suitable for direct food contact.	
SECTION 8: Exposure controls/Personal protection		
8.1. Control parameters		
Occupational exposure limits	3	
SODIUM HYDROXIDE		
Short-term exposure limit (15	5-minute): WEL 2 mg/m³	

WEL = Workplace Exposure Limit.

Ingredient comments

Where an exposure level is quoted, a risk assessment should consider if there is a need to monitor the atmosphere of the working environment. Results should be compared against the WEL and/or DNEL information provided. Where a worker is exposed to levels approaching a limit, further exposure control measures should be considered to reduce exposure to the substance. DNEL and/or PNEC information is supplied by manufacturers of substances in accordance with REACH legislation (Regulation (EC) No 1907/2006), and is used to provide suitable risk reduction measures to limit exposure of the user of the substance to a non hazardous level. If the measured level of exposure by a route divided by the DNEL for the route is greater than 1, then further exposure controls should be implemented as described in section 8.2. Where new information becomes available under REACH, this will be passed on as revisions to the Safety Data Sheet.

ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM SALT (CAS: 64-02-8)

DNEL	Professional - Inhalation; Long term systemic effects: 1.5 mg/m ³
PNEC	- Fresh water; 2.86 mg/l - marine water; 0.286 mg/l - Intermittent release; 1.56 mg/l - Soil; 0.937 mg/kg, mg/kg dwt - STP; 55.94 mg/kg
	CITRIC ACID (CAS: 5949-29-1)
PNEC	 Fresh water; 0.44 mg/l marine water; 0.044 mg/l STP; >1000 mg/l Sediment (Freshwater); 34.6 mg/kg Sediment (Marinewater); 3.46 mg/kg Soil; 33.1 mg/kg
	SODIUM HYDROXIDE (CAS: 1310-73-2)
DNEL	Industry - Inhalation; Long term local effects: 1.0 mg/m ³ DNEL data for Professional users is not yet available, but it is assumed to be the same as for Industrial users. Industry - Dermal; Short term local effects: 2%
PNEC	No information is available for PNEC data for Sodium Hydroxide
8.2. Exposure controls	

Protective equipment



Personal protection	The PPE indicated above is not a COSHH assessment. It represents PPE that should be considered during the manufacture, distribution, use and final disposal stages of this product's life cycle. It is the responsibility of employers to conduct a COSHH/risk assessment to determine appropriate PPE levels. The information given below should be used to support this assessment. Where possible replace manual processes with automated or closed processes to minimise contact with the product.
Eye/face protection	The following protection should be worn: Chemical splash goggles. Refer to EN Standard 166 to select appropriate level of protection.
Hand protection	Rubber (natural, latex). Neoprene. Polyvinyl chloride (PVC). The expected use of this product is such that gloves with a breakthrough time of >60 minutes should be regarded as sufficient. Gloves should be inspected regularly for damage and replaced when necessary. Refer to Standard EN 374 and EN 16523
Other skin and body protection	Wear suitable protective clothing as protection against splashing or contamination. Reference to EN 13832 and EN 943 is useful when selecting footwear and clothing.
Hygiene measures	Promptly remove non-impervious clothing that has become contaminated, provided it is not adhered to the skin. Wash contaminated clothing before reuse.
Respiratory protection	No specific recommendation made, but respiratory protection must be used if the general level exceeds the Workplace Exposure Limit. In the case of dust or aerosol formation (eg spraying), or vapour from hot vessels, use respiratory protection with an approved filter (P2).
Environmental exposure controls	Do not allow the substance to contaminate surface water/ground water. See points 6, 12 &13.
General Health and Safety Measures.	The above requirements refer to the neat product. A 5% solution of this product would not be classified. However, we would recommend eye protection if there is a risk of splashing, also use of gloves. A full Risk Assessment should be carried out before handling any chemical(s). Risk Assessments should refer to COSHH, and any other relevant legislation or industry specific guidelines governing the use of chemicals. Alkyl Benzyl Dimethyl Ammonium Chloride has been linked to skin sensitisation by prolonged or repeated exposure. Use of gloves is recommended.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties		
Appearance	Clear liquid.	
Colour	Blue.	
Odour	Slight.	
Odour threshold	Not applicable.	
рН	pH (concentrated solution): 9 - 10 pH (diluted solution): 7 - 8 @ $3\% v/v$	
Melting point	Not applicable.	
Initial boiling point and range	Not applicable.	
Flash point	Not applicable.	
Evaporation rate	Not applicable.	

Evaporation factor	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	1.03 @20 Degrees C
Bulk density	Not applicable.
Solubility(ies)	Soluble in water.
Partition coefficient	Not applicable. Not technically practical for mixtures.
Auto-ignition temperature	Not applicable.
Decomposition Temperature	Not applicable.
Viscosity	Not determined.
Explosive properties	Not applicable.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not applicable. Contains no Oxidising Components.
9.2. Other information	
Refractive index	Not applicable.
Particle size	Not applicable.
Molecular weight	Not applicable.
Volatility	Not applicable.
Saturation concentration	Not applicable.
Critical temperature	Not applicable.
Volatile organic compound	Not applicable.
Explosive Properties	Not Classified as Explosive
Storage Temperature Range	0 to + 40 Degrees C
SECTION 10: Stability and rea	ctivity
10.1. Reactivity	
Reactivity	Not expected to react when correctly stored and used. Mixing with other chemicals may produce unexpected reactions.
10.2. Chemical stability	
Stability	Stable at normal ambient temperatures and when used as recommended See note 10.6.
10.3. Possibility of hazardous	reactions
Possibility of hazardous reactions	Refer to section 10.1.
10.4. Conditions to avoid	

Conditions to avoid Avoid excessive neat for prolonged periods of time.	Conditions to avoid	Avoid excessive heat for prolonged periods of time.	
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10.5. Incompatible materials

Materials to avoid

Do not mix with Hypochlorite based chemicals this could result in a hazardous reaction producing heat, CO2 and O2.

10.6. Hazardous decomposition products

Hazardous decomposition Does not decompose when used and stored as recommended. - See section 10.5. products

SECTION 11: Toxicological int	SECTION 11: Toxicological information	
11.1. Information on toxicological effects		
Acute toxicity - oral		
ATE oral (mg/kg)	16,860.92	
Acute toxicity - dermal		
ATE dermal (mg/kg)	39,000.0	
Acute toxicity - inhalation		
ATE inhalation (dusts/mists mg/l)	39.47	
Skin sensitisation		
Skin sensitisation	Alkyl Benzyl Dimethyl Ammonium Chloride has been linked to skin sensitisation by prolonged or repeated exposure. Use of gloves is recommended.	
Carcinogenicity		
Carcinogenicity	The components of this formulation will not be systemically available in the body under normal conditions of handling. As a consequence it is not expected to cause cancer.	
Reproductive toxicity		
Reproductive toxicity - fertility	The components of this formulation will not be systemically available in the body under normal conditions of use and handling. As a consequence it is not expected to be toxic to the reproductive system or developing foetus.	
General information	See section 4.2.	
Inhalation	Unlikely route of exposure. Inhalation of sprayed droplets may result in soreness of the throat, mouth and nose See section 4.2.	
Ingestion	Unlikely route of exposure without deliberate abuse. There may be soreness and redness of mouth and throat. A soapy taste may be reported. May cause irritation/discomfort to mucous membranes.	
Skin contact	Under normal conditions of use exposure time will be short and the likelihood of causing skin irritation will be very low. Prolonged or repeated contact of in use solutions with skin may cause redness, itching, irritation and eczema/chapping. Use solutions may cause mild irritation especially to open cuts and abrasions.	
Eye contact	May cause permanent eye injury.	
SECTION 12: Ecological inform	mation	
Ecotoxicity	This product is classified as very toxic to aquatic life, this refers to the neat product. Normal	

This product is classified as very toxic to aquatic life, this refers to the neat product. Normal use is not expected to pose a risk.

12.1. Toxicity

Acute aquatic toxicity Acute toxicity - fish	Normal use of diluted product is unlikely to pose a risk. See note 12.0. To the best of our current knowledge, the main ecotoxicological effect is due to the Alky Benzyl Dimethyl Ammonium Chloride and Didecyl Dimethyl Ammonium Chloride, for which the following data is available :- Alkyl Benzyl Dimethyl Ammonium Chloride:-
	The EC50/48h value for Daphnia is 0.03mg/l. The EC50/96h value for Selenastrum capricornutum is 0.06mg/l. The LC50/96h value for Rainbow Trout is 1.7 mg/l. Behaviour in sewage processing plants - EC20 / 0.5hr = 10mg/l (Activated Sludge).
	Didecyl Dimethyl Ammonium Chloride:-
	The EC(50)/48hr Value for Daphnia magna is 0.062mg/l. The LC(50)/96hr for fathead minnow is 0.19mg/l Toxicity to bacteria in activated sewage sludge (EC50)/3hr = 11mg/l
12.2. Persistence and degrad	ability
Persistence and degradability	The surfactant(s) used in this preparation complies (comply) with the biodegradability criteria as laid down in the European Detergents Regulation No 648/2004 as amended.
12.3. Bioaccumulative potentia	al
Bioaccumulative potential	Not expected to bioaccumulate.
Partition coefficient	Not applicable. Not technically practical for mixtures.
12.4. Mobility in soil	
Mobility	The product contains substances which are water soluble and may spread in water systems.
12.5. Results of PBT and vPv	B assessment
Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.
12.6. Other adverse effects	
Other adverse effects	Not determined.
SECTION 13: Disposal consid	lerations
13.1. Waste treatment method	ds
General information	When handling waste, the safety precautions applying to handling of the product should be considered. Do not mix with other chemicals.
Disposal methods	Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. Small volumes of use solution can be disposed of to sewers.
SECTION 14: Transport inform	nation
14.1. UN number	
UN No. (ADR/RID)	3082
UN No. (IMDG)	3082

UN No. (ICAO)	3082

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ALKYL BENZYL DIMETHYL AMMONIUM CHLORIDE, DIDECYL DIMETHYL AMMONIUM CHLORIDE)
Proper shipping name (IMDG)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ALKYL BENZYL DIMETHYL AMMONIUM CHLORIDE, DIDECYL DIMETHYL AMMONIUM CHLORIDE)
Proper shipping name (ICAO)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ALKYL BENZYL DIMETHYL AMMONIUM CHLORIDE, DIDECYL DIMETHYL AMMONIUM CHLORIDE)
Proper shipping name (ADN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ALKYL BENZYL DIMETHYL AMMONIUM CHLORIDE, DIDECYL DIMETHYL AMMONIUM CHLORIDE)
14.3. Transport hazard class(es)	

ADR/RID class	9
ADR/RID label	9
IMDG class	9
ICAO class/division	9

Transport labels

14.4. Packing group	
ADR/RID packing group	Ш
IMDG packing group	Ш
ICAO packing group	Ш

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



EmS	F-A, S-F
Emergency Action Code	•3Z
Hazard Identification Number (ADR/RID)	90
Tunnel restriction code	(E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable. Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

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

National regulations	UK Adoption and Implementation of the UN Globally Harmonised System (GHS) on Classification and Labelling of Chemicals (GB CLP) and considers UK National REACH legislation. Also UK Biocides Regulations.
EU legislation	European Regulation (EC) No 1272/2008 (as amended) on Classification, Labelling and Packaging of Substances and Mixtures. Also considered is the REACH Regulation (EC) No.1907/2006 (as amended). REGULATION (EU) No 528/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 22 May 2012 concerning the making available on the market and use of biocidal products. [BPR]

15.2. Chemical safety assessment

Pcs Information	Contains 2% wt/wt Alkyl Benzyl Dimethyl Ammonium Chloride and 0.5% wt/wt Didecyl Dimethyl Ammonium Chloride. Authorisation Holder: Holchem Laboratories Ltd.
Pcs Number	PCS No:- 99923

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	 NPIS - National Poisons Information Service. vPvB - Very Persistent, Very bioaccumulative. PBT - Persistent, Bioaccumulative & Toxic. REACH - Registration, Evaluation, Authorisation & restriction of CHemicals (Regulation EC 1907/2006). DNEL - Derived No Effect Limit. PNEC - Predicted No Effect Concentration. COSHH - Control of Substances Hazardous to Health. LC50 - Lethal Concentration 50 - The environmental contamination at which 50% mortality is reached over a fixed time scale. LD50 - Lethal Dose 50 - The dose at which 50% of the tested group will die. Industry - Refers in section 8 to application of the substance in an industrial process. Professional - Refers in section 8 to application/use of the preparation/product in a skilled trade premises.
General information	This document is a Safety Data Sheet, NOT a CoSHH assessment. It is the customer's responsibility to conduct a full CoSHH assessment, taking into account the information held within this document along with other local factors considered in a risk assessment. The Risk and Hazard statements listed below are the full text of abbreviations used in this document. They are not the final classification, for this refer to section 2.
Revision comments	Amendment to the emergency phone number in Section 1.4.
Revision date	28/10/2021
SDS number	25324

Hazard statements in full	 H290 May be corrosive to metals. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H318 Causes serious eye damage. H319 Causes serious eye irritation. H332 Harmful if inhaled. H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.
REACH extended MSDS comments	REACH requires that persons handling chemicals should take the necessary risk management measures, in accordance with assessments from manufacturers and importers of chemical substances. The relevent recommendations must be passed along the supply chain. These assessments are generally reported in Exposure Scenarios. Where Exposure Scenarios have been provided for substances used in this product, the relevent information is incorporated into the safety data sheet.
END OF SAFETY DATA SHEET	

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.