



HOLCHEM

SAFETY DATA SHEET OPTIMUM SANITISER

According to Regulation (EC) No. 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures.

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

1.1. Product identifier

Product name OPTIMUM SANITISER

Product number OPTK2

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

Identified uses Disinfectant. 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 Holchem Laboratories Limited
Gateway House, Pilsworth Road,
Pilsworth Industrial Estate,
Bury, Lancashire (UK)
BL9 8RD
+44 (0) 1706 222288
+44 (0) 1706 221550
info@holchem.co.uk

1.4. Emergency telephone number

Emergency telephone Out of Office Hours 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) 7050 265597.
Note:- This number will not accept order queries or calls dealing with equipment breakdowns.
UK Environment Agency 24hour Advisory Service 0800 807060. This product is registered with the NPIS. Irish Environmental Protection Agency 1890 335599 (This is a Lo Call Number)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Met. Corr. 1 - H290

Health hazards Skin Corr. 1B - H314 Eye Dam. 1 - H318 STOT RE 2 - H373

Environmental hazards Aquatic Acute 1 - H400 Aquatic Chronic 2 - H411

2.2. Label elements

Pictogram



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Signal word	Danger
Hazard statements	H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H373 May cause damage to organs (Respiratory tract) through prolonged or repeated exposure if inhaled. H400 Very toxic to aquatic life. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	P273 Avoid release to the environment. P280 Wear protective gloves, eye and face protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. 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. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P501 Dispose of contents/ container in accordance with national regulations.
Contains	ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM SALT, ALKYL BENZYL DIMETHYL AMMONIUM CHLORIDE, ALCOHOL ETHOXYLATE
Detergent labelling	5 - < 15% cationic surfactants, 5 - < 15% EDTA and salts thereof, < 5% non-ionic surfactants
Supplementary precautionary statements	P404 Store in a closed container.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB. Note H290 classification relates to the Neat Undiluted Product. Note: H373 Relates only to neat product as delivered, it does not apply to use solutions. This product is not volatile and not intended for consumption, through normal use H373 is not expected to be a risk, but should be considered as part of a COSHH assessment

SECTION 3: Composition/information on ingredients

3.2. Mixtures

ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM SALT	10 - <20%
CAS number: 64-02-8	EC number: 200-573-9
	REACH registration number: 01-2119486762-27
Classification	Classification (67/548/EEC or 1999/45/EC)
Met. Corr. 1 - H290	Xn;R20,R22. Xi;R41.
Acute Tox. 4 - H302	
Acute Tox. 4 - H332	
Eye Dam. 1 - H318	
STOT RE 2 - H373	

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ALKYL BENZYL DIMETHYL AMMONIUM CHLORIDE		5-10%
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	Classification (67/548/EEC or 1999/45/EC) Xn;R21/22. C;R34. N;R50.	
ALCOHOL ETHOXYLATE		1-5%
CAS number: 68131-39-5	EC number: 500-195-7	REACH registration number: 01-2119488720-33-XXXX
M factor (Acute) = 1		
Classification Acute Tox. 4 - H302 Eye Dam. 1 - H318 Aquatic Acute 1 - H400 Aquatic Chronic 3 - H412	Classification (67/548/EEC or 1999/45/EC) Xn; R22. Xi; R41. N; R50/53	
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	Classification (67/548/EEC or 1999/45/EC) C;R35	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition comments The Biocidally Active components of this product are supported in the Biocidal Products Regulation. Note:- H290 "May be Corrosive to Metals" refers to the neat product.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	When it is safe to do so, remove victim immediately from source of exposure. However, consideration should be given as to whether moving the victim will cause further injury.
Inhalation	Remove affected person from source of contamination. If breathing stops, provide artificial respiration. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.
Ingestion	Do not induce vomiting. Rinse mouth thoroughly with water. Place unconscious person on the side in the recovery position and ensure breathing can take place. Get medical attention.
Skin contact	Remove contaminated clothing that is not stuck to the skin. Flush area with clean water. Get medical attention if any discomfort continues. Continue to rinse for at least 15 minutes.

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Eye contact Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes and get medical attention.

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

General information Neat product may cause chemical burns and permanent eye damage. Dilute product may cause irritation to the skin and eyes.

Inhalation Unlikely route of exposure. Inhalation of sprayed droplets may result in soreness of the throat, mouth and nose.

Ingestion Unlikely route of exposure without deliberate abuse. If neat chemical is ingested, chemical burning of mouth, throat and GI tract will occur. If dilute chemical is ingested some soreness of the mouth, throat and GI tract may occur.

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 immediate medical attention and special treatment needed

Notes for the doctor Rinse well with water to neutral pH. Contains a blend of Chelating agents, Surfactants and Cationic Biocides in aqueous solution.

SECTION 5: Firefighting measures

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 from the substance or mixture

Specific hazards In contact with some metals (Aluminium, Zinc and their Alloys) Hydrogen Gas is formed, which may form an explosive mixture with air. Note - Comment refers to neat product. Mixing with Hypochlorite based chemicals could result in a dangerous heating of the solution and evolution of Carbon Dioxide and Oxygen. Note - Comment refers to neat product.

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 measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

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. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. 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.

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6.4. Reference to other sections

Reference to other sections See sections 8,12 & 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Wear suitable protective equipment for prolonged exposure and/or high concentrations of vapours, spray or mist. Read and follow manufacturer's recommendations.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep container tightly closed. Keep only in the original container. Store in a demarcated bunded area to prevent release to drains and/or watercourses. Store between - 5 and 40 Degrees C Store away from:- Acids. Chlorinated materials

7.3. Specific end use(s)

Specific end use(s) Disinfectant, refer to Product Information Sheet for full details.

Usage description This product is suitable for use in food preparation areas, but is not designed for direct food contact.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

SODIUM HYDROXIDE

Short-term exposure limit (15-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. 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. Predicted No Effect Concentration for environmental exposure is given below. 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

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%
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PNEC

No information is available for PNEC data for Sodium Hydroxide

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

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

If risk of splashing, wear safety goggles or face shield. Refer to EN Standard 166 to select appropriate level of protection.

Hand protection

Nitrile Rubber of at least 0.4mm coating thickness with a breakthrough time of >240min. Refer to Standard EN 374.

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. Discharge of solutions into effluent systems (including municipal drains) or to surface water are expected to cause significant pH changes. Discharge of solutions should be carried out such that pH changes are minimised. Where necessary pH buffering measures should be adopted. Users of this product should consult local drainage and permitting authorities to ensure that any restrictions or discharge consents are adhered to.

General Health and Safety Measures.

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. 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. 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	Detergent.
Odour threshold	Not applicable.

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pH	pH (concentrated solution): Approximately 13 - 13.5 pH (diluted solution): 10.5 - 11.5 @1%
Melting point	<0°C
Initial boiling point and range	95 - 110 degrees C
Flash point	Not applicable. Contains no Flammable Components
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	1.08 @ 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.
<u>9.2. Other information</u>	
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	-5 to +40 Degrees C

SECTION 10: Stability and reactivity

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

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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. Do not mix with Hypochlorite based chemicals, this could result in a dangerous heating of the solution. In contact with soft metals such as Aluminium, Hydrogen gas may be produced - Comments refers to the neat product.

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid Strong acids. 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 products Does not decompose when used and stored as recommended. - See section 10.5.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 6,254.18

Acute toxicity - dermal

ATE dermal (mg/kg) 15,600.0

Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l) 13.16

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

Will cause severe irritation to mouth, throat and GI-Tract.

Skin contact

Neat product may cause reddening of skin and with prolonged contact burns.

Eye contact

Risk of serious damage to eyes. May cause permanent eye injury.

SECTION 12: Ecological Information

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Ecotoxicity 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

Toxicity Normal use is not expected to pose an ecological risk.

Acute toxicity - fish

To the best of our current knowledge, the main ecotoxicological effect is due to the Alky Benzyl Dimethyl Ammonium Chloride, for which :-
 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).
 Note:- pH values greater than 10.5 may be fatal to fish and other aquatic organisms, there may also be damage to aquatic plants.
 Normal use of diluted product is unlikely to pose a risk.
 See note 12.0.

12.2. Persistence and degradability

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 potential

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 vPvB 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 considerations

13.1. Waste treatment methods

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 information

14.1. UN number

UN No. (ADR/RID) 1903

UN No. (IMDG) 1903

UN No. (ICAO) 1903

UN No. (ADN) 1903

14.2. UN proper shipping name

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Proper shipping name (ADR/RID)	DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (CONTAINS ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM SALT, ALKYL BENZYL DIMETHYL AMMONIUM CHLORIDE)
Proper shipping name (IMDG)	DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (CONTAINS ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM SALT, ALKYL BENZYL DIMETHYL AMMONIUM CHLORIDE, ALCOHOL ETHOXYLATE)
Proper shipping name (ICAO)	DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (CONTAINS ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM SALT, ALKYL BENZYL DIMETHYL AMMONIUM CHLORIDE)
Proper shipping name (ADN)	DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (CONTAINS ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM SALT, ALKYL BENZYL DIMETHYL AMMONIUM CHLORIDE)

14.3. Transport hazard class(es)

ADR/RID class	8
ADR/RID classification code	C9
ADR/RID label	8
IMDG class	8
ICAO class/division	8
ADN class	8

Transport labels



14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ADN packing group	II
ICAO packing group	II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS	F-A, S-B
ADR transport category	2
Hazard Identification Number (ADR/RID)	80
Tunnel restriction code	(E)

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

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

SECTION 15: Regulatory information

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

EU legislation European Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures.
This replaces Directive 67/548/EEC - Classification, Packaging and Labelling of Dangerous Substances and Regulation (EC) No. 453/2010 relating to the Classification, Packaging and Labelling of Dangerous Preparations. Also considered is the REACH Regulation (EC) No.1907/2006.

15.2. Chemical safety assessment

Pcs Information An Aqueous suspension concentrate containing 5% w/w Benzylcoco alkyldimethyl chlorides. Authorisation Holder Holchem Laboratories Ltd.

Pcs Number PCS No:-94465

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet (EC) No. 1272/2008 : EU Regulation on Classification, Labelling and Packaging of Substances and Mixtures.
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.
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 PCS No 94465

Revision comments Change in classification to include H373. Addition of H411 to classification No change to formulation

Revision date 10/06/2017

Risk phrases in full R20 Harmful by inhalation.
R21/22 Harmful in contact with skin and if swallowed.
R22 Harmful if swallowed.
R34 Causes burns.
R36/38 Irritating to eyes and skin.
R41 Risk of serious damage to eyes.
R50 Very toxic to aquatic organisms.

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Hazard statements in full

H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H373 May cause damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs (Respiratory tract) through prolonged or repeated exposure if inhaled.
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 relevant 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 relevant 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.