



**HOLCHEM**  
**SAFETY DATA SHEET**

**OPTIMUM MACHINE GLASSWASH DETERGENT**

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

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

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**1.1. Product identifier**

**Product name** OPTIMUM MACHINE GLASSWASH DETERGENT  
**Product number** OPTB2

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

**Identified uses** Detergent. For professional use only.  
**Uses advised against** Not for oral consumption. Not for use by hand.

**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

**Manufacturer**

**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 please call:- 0870 190 6777. NOTE: This number will not provide technical details of the product, or deal with other general enquiries regarding application and use of the product. Irish Environmental Protection Agency 1890 335599. This product is registered with the NPIS. UK Environment Agency 24hour Advisory Service 0800 807060.

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**SECTION 2: Hazards identification**

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**2.1. Classification of the substance or mixture**

**Classification**

**Physical hazards**

Met. Corr. 1 - H290

**Health hazards**

Skin Corr. 1B - H314 Eye Dam. 1 - H318

**Environmental hazards**

Not Classified

**2.2. Label elements**

**Pictogram**

## OPTIMUM MACHINE GLASSWASH DETERGENT

**Signal word**

Danger

**Hazard statements**

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

**Precautionary statements**

P234 Keep only in original container.

P280 Wear eye and face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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.

**Contains**

SODIUM HYDROXIDE, DISODIUM METASILICATE, -\* AMINOTRIMETHYLENE PHOSPHONIC ACID, SODIUM SALT, ATMP.5Na

**Detergent labelling**

&lt; 5% phosphonates, &lt; 5% polycarboxylates

**Supplementary precautionary statements**

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P405 Store locked up.

P501 Dispose of contents/container in accordance with national regulations.

**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.

**SECTION 3: Composition/Information on ingredients****3.2. Mixtures**

|  |  |
|--|--|
| <b>SODIUM HYDROXIDE</b>  | <b>1-5%</b>                                      |
| CAS number: 1310-73-2 EC number: 215-185-5 REACH registration number: 01-2119457892-27 |  |
| <b>Classification</b>  | <b>Classification (67/548/EEC or 1999/45/EC)</b> |
| Met. Corr. 1 - H290  | C;R35  |
| Skin Corr. 1A - H314   |  |
| <b>DISODIUM METASILICATE</b>   | <b>1-5%</b>                                      |
| CAS number: 6834-92-0 EC number: 229-912-9   |  |
| <b>Classification</b>  | <b>Classification (67/548/EEC or 1999/45/EC)</b> |
| Met. Corr. 1 - H290  | C;R34 Xi;R37                                     |
| Skin Corr. 1B - H314   |  |
| STOT SE 3 - H335   |  |

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|  |  |      |
|--|--|------|
| -*- AMINOTRIMETHYLENE PHOSPHONIC ACID, SODIUM SALT, ATMP.5Na |  | 1-5% |
| CAS number: 20592-85-2 EC number: —                          |  |      |
| <b>Classification</b>  | <b>Classification (67/548/EEC or 1999/45/EC)</b> |      |
| Met. Corr. 1 - H290  | -  |      |
| Skin Irrit. 2 - H315   |  |      |
| Eye Dam. 1 - H318  |  |      |

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

**Composition comments** To the best of our knowledge, all of the substances used in this product are being supported for the relevant application in REACH., -\*- Formed in situ by neutralisation reaction during manufacture, ingredient used for purpose of classification.

## 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

Inhalation unlikely. Product in mist or aerosol may lead to irritation of the respiratory tract. If breathing stops, provide artificial respiration. Get medical attention.

#### Ingestion

Do not induce vomiting. Rinse mouth thoroughly. Place unconscious person on their 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. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

#### Eye contact

Remove any contact lenses and open eyelids wide apart. Promptly wash eyes with plenty of water while lifting the eyelids. Continue to rinse for at least 15 minutes and get medical attention.

#### Protection of first aiders

First aid personnel should wear appropriate protective equipment during any rescue.

### 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

Inhalation of neat product is unlikely. However, inhalation of mists or vapours of diluted product may result in soreness, irritation or burns to the mouth, nose and respiratory tract.

#### 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, soreness of mouth, throat and GI tract may occur together with redness and blistering.

#### Skin contact

May cause serious chemical burns to the skin.

#### Eye contact

May result in permanent eye damage.

### 4.3. Indication of any immediate medical attention and special treatment needed

#### Notes for the doctor

Contains Caustic, Silicates and Chelating agents in an aqueous solution. Rinse well with water to neutral pH.

## SECTION 5: Firefighting measures

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### 5.1. Extinguishing media

#### **Suitable extinguishing media**

This product will not support combustion and is not flammable. Use an extinguishing media suitable for surrounding materials.

### 5.2. Special hazards arising from the substance or mixture

#### **Specific hazards**

This product is non combustible, on heating corrosive vapours may be formed.

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.

### 5.3. Advice for firefighters

#### **Special protective equipment for firefighters**

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

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## **SECTION 6: Accidental release measures**

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### 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.

### 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 spillage for reclamation or disposal in sealed containers via a licensed waste contractor. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

### 6.4. Reference to other sections

#### **Reference to other sections**

See sections 8,12 & 13

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## **SECTION 7: Handling and storage**

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### 7.1. Precautions for safe handling

#### **Usage precautions**

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Refer to section 8.

### 7.2. Conditions for safe storage, including any incompatibilities

#### **Storage precautions**

Keep container tightly closed. Keep only in the original container in a cool, well-ventilated place. Store between +5 and +40 Degrees C Store away from the following materials: Acids.

### 7.3. Specific end use(s)

#### **Specific end use(s)**

Detergent, refer to Product Information Sheet for full details.

#### **Usage description**

This product is suitable for cleaning drinking glasses. NOTE this product must be rinsed away after cleaning before the glass is used for consumption of liquids.

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## **SECTION 8: Exposure Controls/personal protection**

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### 8.1. Control parameters

#### **Occupational exposure limits**

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### SODIUM HYDROXIDE

Long-term exposure limit (8-hour TWA): WEL

Short-term exposure limit (15-minute): WEL 2 mg/m<sup>3</sup>

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.

The Long Term WEL refers to total exposure of a worker to a specific substance averaged out over an 8 hour period.

The Short Term WEL refers to a single exposure of a worker to a specific substance over a 15 minute period.

If the Short Term WEL is exceeded and no Long Term Limit is set, further exposure during the working shift is not permitted.

Further controls should be implemented to ensure that future exposure to the substance is reduced below the levels set before the activity is repeated/continued.

Where no Short Term WEL exists, guidance from the HSE is to use a value of three times the Long Term WEL.

The WEL limits are laid down in the EH40 list as supplied by the HSE. This is taken from the Chemical Agents Directive (98/24/EC). 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.

#### SODIUM HYDROXIDE (CAS: 1310-73-2)

DNEL

Industry - Inhalation; Long term local effects: 1.0 mg/m<sup>3</sup>

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



#### Appropriate engineering controls

As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist.

#### 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

Rubber (natural, latex). Polyvinyl chloride (PVC). Neoprene.  
Refer to Standard EN 374.

#### Other skin and body protection

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Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible. 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. Contaminated clothing and shoes must be discarded. Provide eyewash station and safety shower.

### Respiratory protection

No specific recommendation made, but respiratory protection must be used if the general level exceeds the Workplace Exposure Limit.

### Environmental exposure controls

Do not allow the substance to contaminate surface water/ground water. See points 6, 12 & 13.

Users of this product should consult local drainage and permitting authorities to ensure that any restrictions or discharge consents are adhered to. 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.

### General Health and Safety Measures.

The above requirements refer to the neat product. Normal use solutions of this product are unclassified. However, a full COSHH assessment should still be conducted. We recommend use of gloves and eye protection. Risk assessments should refer to COSHH and any other relevant legislation or industry specific guidelines governing the use of Chemicals.

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## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

#### Appearance

Clear liquid.

#### Colour

Colourless to pale yellow.

#### Odour

No characteristic odour.

#### Odour threshold

Not applicable.

#### pH

pH (diluted solution): 11.5 - 12.5 @ 1% 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.

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**Vapour pressure**

Not applicable.

**Vapour density**

Not applicable.

**Relative density**

1.3 @ 20 Degrees C

**Bulk density**

Not applicable.

**Solubility(ies)**

Soluble in water.

**Partition coefficient**

Not applicable.

**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**

Does not meet the criteria for classification as oxidising.

**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**    +5 to +40 Degrees C

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**SECTION 10: Stability and reactivity**

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**10.1. Reactivity**

Not expected to react when correctly stored and used. Mixing with other chemicals may produce unexpected reactions. Reacts violently with strong acids.

**10.2. Chemical stability**

## OPTIMUM MACHINE GLASSWASH DETERGENT

### Stability

Stable at normal ambient temperatures and when used as recommended. Avoid contact with acids. Avoid the following conditions:

### 10.3. Possibility of hazardous reactions

Refer to section 10.1. Do not mix with acids, this will generate heat and give off corrosive vapours.

### 10.4. Conditions to avoid

Avoid excessive heat for prolonged periods of time.

### 10.5. Incompatible materials

#### Materials to avoid

Strong acids. - Note: reaction relates to neat product.

Reaction with Aluminium, Zinc, Tin, Copper or their alloys produces flammable Hydrogen Gas.

### 10.6. Hazardous decomposition products

No specific hazardous decomposition products noted. - See section 10.5.

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## SECTION 11: Toxicological information

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### 11.1. Information on toxicological effects

#### Respiratory sensitisation

No evidence of respiratory sensitisation for any component of this formulation.

#### Skin sensitisation

No evidence of skin sensitisation for any component of this formulation.

#### Carcinogenicity

The components of this formulation are corrosive to skin and the respiratory tract, but 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 are corrosive to the skin and respiratory tract, but 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 the developing foetus.

### **General information**

Toxic effect linked with corrosive properties. 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**

Causes severe burns. May cause chemical burns in mouth, oesophagus and stomach.

#### **Skin contact**

Causes severe burns.

#### **Eye contact**

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

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## SECTION 12: Ecological Information

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### **Ecotoxicity**

The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

### 12.1. Toxicity

#### **Acute toxicity - fish**

This mixture is not classified as toxic to aquatic organisms. Note:- pH values greater than 10.5 may be fatal to fish and other aquatic organisms, there may also be damage to aquatic plants. See note 12.0.



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### 12.2. Persistence and degradability

#### **Persistence and degradability**

This product consists mainly of inorganic components for which biodegradation assessment is not applicable. The product meets the requirements of the European Detergents Regulation 648/2004 as amended.

### 12.3. Bioaccumulative potential

Not expected to bioaccumulate.

#### **Partition coefficient**

Not applicable.

### 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

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

### 12.6. Other adverse effects

Not determined.

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## SECTION 13: Disposal considerations

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### 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 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.

#### **Disposal methods**

Small volumes of use solution can be disposed of to sewers.

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## SECTION 14: Transport information

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### 14.1. UN number

|                  |      |
|------------------|------|
| UN No. (ADR/RID) | 1824 |
| UN No. (IMDG)    | 1824 |
| UN No. (ICAO)    | 1824 |

### 14.2. UN proper shipping name

|                                |                           |
|--------------------------------|---------------------------|
| Proper shipping name (ADR/RID) | SODIUM HYDROXIDE SOLUTION |
| Proper shipping name (IMDG)    | SODIUM HYDROXIDE SOLUTION |
| Proper shipping name (ICAO)    | SODIUM HYDROXIDE SOLUTION |
| Proper shipping name (ADN)     | SODIUM HYDROXIDE SOLUTION |

### 14.3. Transport hazard class(es)

|                         |   |
|-------------------------|---|
| ADR/RID class           | 8 |
| ADR/RID subsidiary risk |   |
| ADR/RID label           | 8 |
| IMDG class              | 8 |
| IMDG subsidiary risk    |   |
| ICAO class/division     | 8 |
| ICAO subsidiary risk    |   |

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### Transport labels



### 14.4. Packing group

|                       |    |
|-----------------------|----|
| ADR/RID packing group | II |
| IMDG packing group    | II |
| ICAO packing group    | II |

### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

### 14.6. Special precautions for user

|  |          |
|--|----------|
| EmS                                    | F-A, S-B |
| Emergency Action Code                  | 2R       |
| Hazard Identification Number (ADR/RID) | 80       |

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

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## 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

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## 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. COSHH - Control of Substances Hazardous to Health.

DNEL - Derived No Effect Limit.

Industry - Refers in section 8 to application of the substance in an industrial process.

NPIS - National Poisons Information Service.

PBT - Persistent, Bioaccumulative & Toxic.

Professional - Refers in section 8 to application/use of the preparation/product in a skilled trade premises. REACH - Registration, Evaluation, Authorisation & restriction of CHEMicals (Regulation EC 1907/2006).

vPvB - Very Persistent, Very bioaccumulative.

### General information

Only trained personnel should use this material.

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

## OPTIMUM MACHINE GLASSWASH DETERGENT

Review in line with CLP Regulation.

**Revision date** 30/03/2015

**Risk phrases in full**

R34 Causes burns.  
R35 Causes severe burns.  
R37 Irritating to respiratory system.

**Hazard statements in full**

H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H335 May cause respiratory irritation.

**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.

### Disclaimer

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.