



OPTIMUM DECARBONISER PTC

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 DECARBONISER PTC
Product number OPTK29

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

Identified uses Caustic Detergent. For professional use only.
Uses advised against Not for direct contact with Food or Beverage stuffs. 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

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.

This product is registered with the NPIS. UK Environment Agency 24hour Advisory Service 0800 807060. Irish Environmental Protection Agency 1890 335599.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards

Not Classified

Health hazards

Skin Corr. 1B - H314 Eye Dam. 1 - H318 STOT SE 3 - H335

Environmental hazards

Not Classified

2.2. Label elements

Pictogram



OPTIMUM DECARBONISER PTC**Signal word** Danger**Hazard statements**

H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.

Precautionary statements

P280 Wear protective gloves, eye and face protection.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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

DISODIUM METASILICATE, ALCOHOL ETHOXYLATE

Detergent labelling

5 - < 15% phosphates, < 5% non-ionic surfactants

Supplementary precautionary statements

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.

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

SODIUM CARBONATE 30-60% CAS number: 497-19-8 EC number: 207-838-8	
Classification Eye Irrit. 2 - H319	Classification (67/548/EEC or 1999/45/EC) Xi;R36
DISODIUM METASILICATE 10-30% CAS number: 6834-92-0 EC number: 229-912-9	
Classification Met. Corr. 1 - H290 Skin Corr. 1B - H314 STOT SE 3 - H335	Classification (67/548/EEC or 1999/45/EC) C;R34 Xi;R37
ALCOHOL ETHOXYLATE 1-5% CAS number: 68131-39-5 EC number: 500-195-7 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) Xi;R41. N;R50.

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.

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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. Provide rest, warmth and fresh air. If breathing stops, provide artificial respiration. Get medical attention if any discomfort continues.

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 powder dust may result in burns to the mouth, nose and respiratory tract. 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. May cause abrasion to the eye surface.

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

Notes for the doctor

Contains Caustic Silicates, Chelating Agents and Surfactants in Aqueous Solution. Rinse well with water to neutral pH. Check for abrasion to the surface of eyes.

SECTION 5: Firefighting measures

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

In contact with some metals (Aluminium, Zinc and their Alloys) Hydrogen Gas is formed, which may form an explosive mixture with air. Note comment applied to concentrated solutions or damp powder.

5.3. Advice for firefighters

Protective actions during firefighting

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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.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into suitable waste disposal containers and seal securely. 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

SECTION 7: Handling and storage

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 -10 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 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 CARBONATE

Long-term exposure limit (8-hour TWA): 8 mg/m³

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

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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.

Where new information becomes available under REACH, this will be passed on as revisions to the Safety Data Sheet.

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

Impervious Chemical Resistant Gloves of Butyl Rubber, PVC, Polychloroprene with a natural latex liner, all with a minimum material thickness 0.5mm and a breakthrough time of >480mins. Alternatively Nitrile Rubber, Fluorinated Rubber, both with a minimum thickness of 0.35 - 0.4mm and a breakthrough time of >480minutes.

Refer to Standard EN 374.

Other skin and body protection

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. 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.

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.

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General Health and Safety Measures.

The above information relates to the neat product. Solutions of 3% and lower strengths would not be classified, but use of gloves and eye protection is still recommended. 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.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance

Granules. Powder

Colour

White.

Odour

Indistinct.

Odour threshold

Not applicable.

pH

pH (diluted solution): 11.5 - 12.5 @ 1% (10g/ltr)

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

Not applicable.

Bulk density

Not applicable.

Solubility(ies)

Soluble in water.

Partition coefficient

Not applicable.

Auto-ignition temperature

Not applicable.

Decomposition Temperature

Not applicable.

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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 determined.

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 -10 to +40 Degrees C

SECTION 10: Stability and reactivity

10.1. Reactivity

Not expected to react when correctly stored and used. Mixing with other chemicals may produce unexpected reactions. The solution is strongly alkaline and reacts with strong acids with heat generation.

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

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

Reaction with Aluminium, Zinc, Tin, Copper or their alloys produces flammable Hydrogen Gas. - Note: reaction relates to neat product. Avoid contact with acids. Avoid use of Copper Pipes for dilute or concentrated product. Copper will be dissolved and pipes will eventually leak.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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Acute toxicity - oral

ATE oral (mg/kg)

12,820.51282051

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

Inhalation of neat powdered product is unlikely without deliberate abuse, but will result in burns to the mouth, nose and respiratory tract. Inhalation of mists or vapours of diluted product may result in soreness, irritation or burns to the mouth, nose and respiratory tract.

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.

SECTION 12: Ecological Information

Ecotoxicity

This product is not classified as hazardous to the environment. However it contains a component (or components) that is (are) classified as very toxic to the aquatic environment in their neat form. Normal use is unlikely to pose a risk to the environment.

12.1. Toxicity

Acute toxicity - fish

This mixture is not classified as toxic to aquatic organisms.

Normal use of the diluted product is not expected to pose any risk. See note 12.0 Note:- pH values greater than 10.5 may be fatal to fish and other aquatic organisms, there may also be damage to aquatic plants.

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

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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.

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 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.

SECTION 14: Transport information**14.1. UN number**

UN No. (ADR/RID)	3253
UN No. (IMDG)	3253
UN No. (ICAO)	3253

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	DISODIUM TRIOXOSILICATE
Proper shipping name (IMDG)	DISODIUM TRIOXOSILICATE
Proper shipping name (ICAO)	DISODIUM TRIOXOSILICATE
Proper shipping name (ADN)	DISODIUM TRIOXOSILICATE

14.3. Transport hazard class(es)

ADR/RID subsidiary risk

ADR/RID label 8

IMDG class 8

IMDG subsidiary risk

ICAO class/division 8

ICAO subsidiary risk

Transport labels

**14.4. Packing group**

IMDG packing group	III
ICAO packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS	F-A, S-B
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Emergency Action Code 2X

Hazard Identification Number 80
(ADR/RID)

14.7. Transport in bulk according to Annex II of MARPOL73/78 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

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

Review in line with CLP Regulation.

Revision date 30/03/2015

Risk phrases in full

R34 Causes burns.

R36 Irritating to eyes.

R50 Very toxic to aquatic organisms.

R41 Risk of serious damage to eyes.

R37 Irritating to respiratory system.

Hazard statements in full

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H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
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.

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.