

SAFETY DATA SHEET

In accordance with Annex II of Regulations (EC) 1907/2006 as amended by Regulation (EU) 830/2015

1 IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY

1.1 Product identifier

Product Name: **Descalc C**

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

Descaler - For professional use only

Uses advised against:

Uses other than those identified are not recommended

1.3 Details of the supplier of the safety data sheet

Company Name: Gannon Chemicals Ltd
Ballindine, Claremorris
Co. Mayo, Ireland
Email address of SDS author: paul@gannonchemicals.ie

1.4 Emergency Telephone Number

Members of Public: +353 (1) 809 2166. (8.00 a.m. to 10.00 p.m. 7 days a week)
Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin Irrit. 2 - H315

Eye Irrit. 2 - H319

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word: **Warning**

Hazard statement(s)

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statement(s)

P264 Wash contaminated skin thoroughly after handling

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

P310 Immediately call a POISON CENTER or doctor/physician.

Supplemental Hazard: **None**

2.3 Other hazards

No other hazards known. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII.

3 COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures

Product/Ingredient Name	CAS No.	Weight %	EC Number	Regulation (EC) No 1272/2008 [CLP]
Citric Acid	77-92-9	15 – 30	201-069-1	Eye Irrit. 2; H319
Methanesulphonic Acid	75-75-2	1 - 5	200-898-6	Skin Corr. 1B H314 Acute Tox. 4 (oral) H312 Acute Tox. 4 (dermal) H302
Oxirane, 2-methyl-, polymer with oxirane, mono(2-propylheptyl) ether	166736-08-9	1 - 5	605-450-7	Acute Tox. 4 (oral) Eye Dam./Irrit. 1 H318, H302
N,N-dimethyltetradecylamine N-oxide 30% Soln	3332-27-2	1 - 5	222-059-3	Eye Dam. 1 - H318; Acute Tox. 4 * - H302, Skin Irrit. 2 - H315; Aquatic * Acute 1 - H400, Aquatic Chronic 2 - H411

4 FIRST AID MEASURES

4.1 Description of first aid measures

- | | | |
|-------|------------------------------------|---|
| 4.1.1 | General Information | Immediately remove contaminated clothing. |
| 4.1.2 | Following Inhalation | Keep patient calm, remove to fresh air, and seek medical attention. |
| 4.1.3 | following skin contact | Wash thoroughly with soap and water. |
| 4.1.4 | Following Eye Contact | Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist. |
| 4.1.5 | Following Ingestion | Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention. |
| 4.1.6 | Self-protection of the first aider | |

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: Eye irritation, skin irritation

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5 FIRE FIGHTING MEASURES

5.1 Extinguishing media:

Not flammable. In case of fire use extinguishing media (Carbon dioxide. Dry powder. Water spray jet), appropriate to surrounding conditions. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture

No special hazards known. However as smoke from fires is irritating. Take precautions to protect personnel from exposure.

5.3 Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

5.4 Additional information

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Information regarding personal protective measures see, chapter 8.

6.2 Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

For large amounts: Pump off product.

For residues: Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations.

6.4 Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

7 HANDLING AND STORAGE

- | | | |
|------------|--|--|
| 7.1 | Precautions for safe handling | Ensure there is sufficient ventilation of the area. |
| 7.2 | Conditions for safe storage, including any incompatibilities | Store at normal room temperature and keep container tightly closed. Keep out of reach of children. No special precautions necessary for protection against fire and explosion. Store away from strong acids. |
| 7.3 | Precautions for safe handling | For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed. |

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1. Control parameters

8.2. Exposure controls

Personal protective equipment

Respiratory protection:

Respiratory protection in case of vapour/aerosol release. Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Hand protection:

Chemical resistant protective gloves (EN 374)

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): nitrile rubber (NBR) - 0.4 mm coating thickness.

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:

Tightly fitting safety goggles (cage goggles) (e.g. EN 166) and face shield.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

Wearing of closed work clothing is recommended. Handle in accordance with good industrial hygiene and safety practice.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

(a)	Form	Liquid
(b)	Colour	Clear
(c)	Odour	Faint
(d)	pH value(1% solution)	2.5
(e)	Melting point/range (°C):	Not Determined
(f)	Initial boiling point/range (°C):	Not Determined
(g)	Decomposition temperature (°C)	Not Determined
(h)	Flash point (°C):	Not Determined
(i)	Ignition temperature (°C)	Not Determined
(j)	Vapour pressure (hPa) at ...°C)	Not Determined
(k)	Vapour density (air=1)	Not Determined
(l)	Density (g/cm ³) at 20°C	1.10
(m)	Bulk density (kg/m ³)	Not Determined
(n)	Water solubility (20°C in g/l)	Completely
(o)	Solubility(ies):	Not Determined
(p)	Partition coefficient	Not Determined
(q)	Viscosity, dynamic (mPa s):	Not Determined

9.2 Other information

Incompatible with strong bases

10 STABILITY AND REACTIVITY

10.1 Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

10.2 Chemical stability

The product is stable if stored and handled as prescribed/indicated.

10.3 Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

10.4 Conditions to avoid

See MSDS section 7 - Handling and storage.

10.5 Incompatible materials

Substances to avoid: Halogens, Acids, Reactive Chemicals

10.6 Hazardous decomposition products

No hazardous decomposition products known.

11 TOXICOLOGICAL INFORMATION

11.2.2 Mixtures

No test data is available on the mixture.

Substance data, where relevant and available, are listed below

Substance	Acute toxicity	Skin corrosion/irritation	Serious eye damage/eye irritation	Respiratory or skin sensitisation
Citric Acid	LD50 Oral - Rat - 5,400 mg/kg (OECD Test Guideline 401) LD50 Dermal - Rat - > 2,000 mg/kg (OECD Test Guideline 402) Serious eye damage/eye irritation	Skin corrosion/irritation Skin - Rabbit Result: Mild skin irritation (OECD Test Guideline 404)	Eyes - Rabbit Result: Irritating to eyes. (OECD Test Guideline 405)	Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.
Methanesulphonic Acid	LD50 rat (oral): 649 mg/kg	Skin corrosion/irritation rabbit: Corrosive.	Serious eye damage/irritation : irreversible damage	Skin sensitizing effects were not observed in animal studies.
Oxirane, 2-methyl-, polymer with oxirane, mono(2-propylheptyl) ether	LD50 rat (oral): > 300 - 2,000 mg/kg (OECD Guideline 423) LC50 rat (by inhalation): No data available. LD50 rat (dermal): No data available.	Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)	Serious eye damage/irritation rabbit: irreversible damage	Experimental/calculated data: Guinea pig maximization test guinea pig: Non-sensitizing
N,N-dimethyltetradecylamine N-oxide	Oral, DL50: 1495 mg/kg (rat)	Irritant to skin and mucous membranes.	Strong irritant with the danger of severe eye injury.	Not skin sensitizer (data available).

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

12 ECOLOGICAL INFORMATION

Substance	Toxicity	Persistence and Degradability	Bioaccumulative potential	Mobility in soil
Citric Acid	LC50 - <i>Leuciscus idus melanotus</i> - 440 mg/l - 48 h (OECD Test Guideline 203) Toxicity to daphnia and other aquatic invertebrates static test - <i>Daphnia magna</i> (Water flea) - 1,535 mg/l - 24 h	No Data Available	No Data Available	No Data Available
Methanesulphonic Acid	LC50 (96 h) 10 - 100 mg/l, <i>Oncorhynchus mykiss</i> EC50 (48 h) 10 - 100 mg/l, <i>Daphnia magna</i> EC50 (72 h) 10 - 100 mg/l (growth rate)	Readily biodegradable (according to OECD criteria)	Significant accumulation in organisms is not to be expected	No Data Available

N,N-dimethyltetradecylamine N-oxide	fish, CL50: 2,4 mg/l alga, CE50: 0,19 mg/l daphnia, CE50: 2,64 mg/l alga, NOEC: 0,067 mg/l	The product is readily biodegradable.	Accumulation in organisms is not to be expected.	No Data Available
Oxirane, 2-methyl-, polymer with oxirane, mono(2-propylheptyl) ether	Toxicity to fish: LC50 (96 h) 1 - 10 mg/l, Leuciscus idus EC50 (48 h) 1 - 10 mg/l EC50 (72 h) 1 - 10 mg/l	Elimination information: >= 90 % Bismuth-active substance. Readily biodegradable	Accumulation in organisms is not to be expected.	The substance will not evaporate into the atmosphere from the water surface. Adsorption to solid soil phase is possible.

Results of PBT and vPvB assessment

The product does not fulfil the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative).

13 DISPOSAL

This product does not contain any prescribed substance under the Environmental Protection Act (Prescribed Processes and Substances) Regulations 1991 and is not classified as special waste under the Control of Substances (Special Waste) Regulations 1996, but is classified as controlled waste under the Environmental Protection Act 1990. For small quantities, dilute with water to at least 2.5% w/v (25 g/litre) and pour down a wastewater drain (foul sewer). Rinse out containers at least twice and recycle if facilities exist or dispose of as commercial waste. For larger quantities dispose of safely as commercial waste.

Empty packaging

Dispose of observing national or local regulations.

Suitable cleaning agents:

Water, if necessary with cleaning agent.

14 TRANSPORT INFORMATION

ADR, RID, ADN, IMO/IMDG, ICAO/IATA

ADR, RID, ADN, IMO/IMDG, ICAO/IATA

- 14.1 UN number: Non-dangerous goods
- 14.2 UN proper shipping name: Non-dangerous goods
- 14.3 Transport hazard class(es): Non-dangerous goods
- 14.4 Packing group: Non-dangerous goods
- 14.5 Environmental hazards: Non-dangerous goods
- 14.6 Special precautions for user: Non-dangerous goods

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: The product is not transported in bulk tankers.

15 REGULATORY INFORMATION

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

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

Ingredients according to EC Detergents Regulation 648/2004

Non-ionic surfactants 1 - 5%

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

16 OTHER INFORMATION

This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application.

Classification procedure

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

Abbreviations and acronyms:

- STOT - Specific Target Organ Toxicity
- DNEL - Derived No Effect Limit
- EUH - CLP Specific hazard statement
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative
- ATE - Acute Toxicity Estimate

Date **30/11/2020**

Revision Number: 8

Author: Paul Gannon