

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: **Enzymatic Detergent**

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

Laundry Detergent for On-Premise Laundries - 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

Acute Tox. 4 (H302)

Skin Irrit. 2 (H315)

Eye Dam. 1 (H318) for the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word **Danger**

Hazard statement(s)

H302 - Harmful if swallowed.

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

Precautionary statement(s)

P280 - Wear eye or face protection.

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 CENTRE or 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]
Alkyl alcohol ethoxylate	69011-36-5	25 -50	931-137-2	Acute tox.: Cat. 4 (oral) Eye dam./irrit.: Cat. 1 H318, H302
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, branched	69011-36-5	5 - 10	931-137-2	Acute Tox. 4 (oral) Eye Dam./Irrit. 1 H318, H302
Modified Polyethyleneimine	Polymer	10 - 20	Polymer	No need for classification according to GHS criteria for this product.
Propan-2-ol	67-63-0	5-10	200-661-7	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336
Protease	9014-01-1	0.1 – 1.0	232-752-2	Acute Tox. 4; H302 STOT SE 3; H335 Skin Irrit. 2; H315 Eye Dam. 1; H318 Resp. Sens. 1; H334 Aquatic Acute 1; H400

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

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|------------|--|--|
| 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

Components with workplace control parameters

Component	CAS No.	Value	Control Parameters	Basis
Propan-2-ol	67-63-0	OELV - 8 hrs (TWA)	200 ppm	Ireland. List of Chemical Agents and Occupational Exposure Limit Values - Schedule 1
Protease (Subtilisin)	9014-01-1	OELV - 8 hrs (TWA) STEL 8 Hrs	0.00006 mg/m ³	Ireland. List of Chemical Agents and Occupational Exposure Limit Values - Schedule 1

Chemical agents which following exposure may cause sensitisation of the respiratory tract and lead to asthma, rhinitis or extrinsic allergic alveolitis.

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	Purple
(c)	Odour	Slight Perfume
(d)	pH value(1% solution)	7.5
(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	1.08
(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 acids

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
Alkyl alcohol ethoxylate	LD50 rat (oral): > 300 - 2,000 mg/kg (OECD Guideline 423) LD50 rat (dermal): > 2,000 mg/kg (OECD Guideline 402) Literature data.	Rabbit: non-irritant (OECD Guideline 404)	Rabbit Result: Serious Eye Damage Irreversible damage (Draize test)	Based on the structure, there is no suspicion of a skin-sensitizing potential.
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, branched	LD50 rat (oral): > 5,000 mg/kg (BASF-Test) LD50 rat (dermal): > 2,000 mg/kg (OECD Guideline 402)	Rabbit: Slightly irritating. (OECD Guideline 404)	Irritant. (OECD Guideline 405)	Based on the structure, there is no suspicion of a skin-sensitizing potential.
Modified Polyethyleneimine	Experimental/calculated data: LD50 rat (oral): > 2,000 mg/kg	Non-irritant (OECD Guideline 404)	Non-irritant (OECD Guideline 405)	No Data Available
Propan-2-ol	LD50 Oral - rat - 5,045 mg/kg LC50 Inhalation - rat - 8 h - 16000 ppm LD50 Dermal - rabbit - 12,800 mg/kg	Skin - rabbit Result: Mild skin irritation	Eyes - rabbit Result: Eye irritation - 24 h	No Data Available
Protease (Subtilisin)	LD50: 1800 mg/kg bw (OECD TG 401)	No Data Available	No Data Available	Sensitizer (Human experience)

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
Alkyl alcohol ethoxylate	LC50 (96 h) > 1 - 10 mg/l, <i>Leuciscus idus</i> EC50 (72 h) > 1 - 10 mg/l EC10 (17 h) > 10,000 mg/l (DIN 38412 Part 8)	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.
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, branched	LC50 (96 h) > 1 - 10 mg/l, <i>Leuciscus idus</i> EC50 (48 h) > 1 - 10 mg/l, <i>Daphnia magna</i> EC50 (72 h) > 1 - 10 mg/l (growth rate), <i>Scenedesmus subspicatus</i> EC10 (72 h) > 0.1 - 1 mg/l, <i>Skeletonema costatum</i>	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.
Modified Polyethyleneimine	LC50 (96 h) > 100 mg/l, Fish EC50 (48 h) > 100 mg/l, <i>Daphnia magna</i> EC50 (72 h) > 100 mg/l, algae EC50 (0.5 h), bacteria	< 10 % (28 d) (OECD 301B; ISO 9439; 92/69/EEC, C.4-C) Poorly 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.
Propan-2-ol	LC50 - <i>Pimephales promelas</i> (fathead minnow) 9,640.00 mg/l 96h EC50 - <i>Daphnia magna</i> (Water flea) - 5,102.00 mg/l - 24 h	No Data Available	No Data Available	No Data Available
Protease (Subtilisin)	EC50 (48 hours): 586 µg aep/l (OECD TG 202) LC50 (96 hours): 8.2 mg aep/l (OECD TG 203) ErC50 (72 hours): 830 µg aep/l (OECD TG 201)	Readily biodegradable	Does not bioaccumulate	No Data Available

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.

14 TRANSPORT INFORMATION**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

Amphoteric surfactants, anionic surfactants, non-ionic surfactants 30 -50%

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

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