



SAFETY DATA SHEET
MAXIREN 180/ MAXIREN 600

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name MAXIREN 180/ MAXIREN 600
Product No. CG13052

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

Identified uses This product is an enzymatic preparation used in the food industry.

1.3. Details of the supplier of the safety data sheet

Supplier THE CARBON GROUP
RINGASKIDDY
CORK
IRELAND
+353 21 437 8988
+353 21 437 8950
info@carbon.ie
Contact Person SDS Contact: DCM Compliance, info@dcmcompliance.com

1.4. Emergency telephone number

+353 (0) 21 4378988

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Not classified.
Human health	Resp. Sens. 1 - H334
Environment	Not classified.

Classification (1999/45/EEC) R42.

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

2.2. Label elements

Contains RENNIN

Label In Accordance With (EC) No. 1272/2008



Signal Word Danger

Hazard Statements

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary Statements

P285 In case of inadequate ventilation wear respiratory protection.
P342+311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Supplementary Precautionary Statements

P261 Avoid breathing vapour/spray.
P304+341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

2.3. Other hazards

None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.2. Mixtures**

RENNIN	1-10%
CAS-No.: 9001-98-3	EC No.: 232-645-0
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Resp. Sens. 1 - H334 STOT SE 3 - H335	Classification (67/548/EEC) R42 Xi;R36/37/38

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

Composition Comments

The data shown are in accordance with the latest EC Directives.

SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures****Inhalation**

Move the exposed person to fresh air at once. Keep the affected person warm and at rest. Get prompt medical attention.

Ingestion

DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS!
Rinse mouth thoroughly. Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. Get medical attention immediately! Provide rest, warmth and fresh air.

Skin contact

Remove affected person from source of contamination. Get medical attention promptly if symptoms occur after washing. Rinse the skin immediately with lots of water. Get medical attention if any discomfort continues.

Eye contact

Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

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

May cause allergy or asthma symptoms or breathing difficulties if inhaled. Adverse symptoms may include the following: wheezing and breathing difficulties asthma

Skin contact

Prolonged skin contact may cause redness and irritation.

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

Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES**5.1. Extinguishing media****Extinguishing media**

Use fire-extinguishing media appropriate for surrounding materials. Use: Dry chemicals. Carbon dioxide (CO₂).

5.2. Special hazards arising from the substance or mixture**Hazardous combustion products**

When heated, toxic and corrosive vapours/gases may be formed.

Specific hazards

Containers can burst violently when heated, due to excess pressure build-up.

5.3. Advice for firefighters

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Special Fire Fighting Procedures

Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves conforming to European standard EN 469 will provide a basic level of protection for chemical incidents

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

Stop leak if possible without risk. Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Large spill: Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

6.4. Reference to other sections

For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

7.2. Conditions for safe storage, including any incompatibilities

Store between the following temperatures: 4 to 8°C (39.2 to 46.4°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and wellventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. Sensitive to frost. Keep in a dry place. Store in a dark place.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Ingredient Comments

No exposure limits noted for ingredient(s).

8.2. Exposure controls

Protective equipment**Engineering measures**

No specific ventilation requirements noted, except this product must not be used in a confined space without good ventilation.

Respiratory equipment

Wear suitable respiratory protection.

Hand protection

Suitable gloves: polychloropropene (neoprene), nitrile rubber, butyl rubber, fluor rubber (viton) and polyvinyl chloride (PVC)

Eye protection

Use approved safety goggles or face shield.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Colour	Colourless. Brown.
Odour	Slight fermentation odour.
Solubility	Soluble in cold water.
Initial boiling point and boiling range	
Not determined.	
Melting point (°C)	
Not determined.	
Relative density	
Not determined.	
Bulk Density	
Not determined.	
Vapour density (air=1)	
Not determined.	
Vapour pressure	
Not determined.	
Evaporation rate	
Not determined.	
Evaporation Factor	
Not determined.	
pH-Value, Conc. Solution	3-7
Viscosity	
Not determined.	
Solubility Value (G/100G H₂O@20°C)	
Not determined.	
Decomposition temperature (°C)	
Not determined.	
Odour Threshold, Lower	
Not determined.	
Odour Threshold, Upper	
Not determined.	
Flash point	
Not applicable.	
Auto Ignition Temperature (°C)	
Not determined.	

Flammability Limit - Lower(%)

Not determined.

Flammability Limit - Upper(%)

Not determined.

Partition Coefficient**(N-Octanol/Water)**

Not determined.

Explosive properties

Not applicable.

Oxidising properties

Not applicable.

9.2. Other information

Not known.

SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity**

No data available.

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions**Hazardous Polymerisation**

Unknown.

10.4. Conditions to avoid

Avoid contact with acids and oxidising substances.

10.5. Incompatible materials**Materials To Avoid**

No data available.

10.6. Hazardous decomposition products

No data available.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects****Acute toxicity:****Acute Toxicity (Oral LD50)**

> 5000 mg/kg Rat

Germ cell mutagenicity:**Genotoxicity - In Vitro**

Bacterial Reverse Mutation Test

Negative.

Ingestion

May cause discomfort if swallowed.

Health Warnings

INGESTION. May cause stomach pain or vomiting. Pulmonary sensitiser. SKIN CONTACT. Acts as a defatting agent on skin. May cause cracking of skin, and eczema. May cause sensitisation by skin contact. This chemical may cause skin/eye irritation and burns (corrosive). May cause skin irritation/eczema. INHALATION. Severe pulmonary irritant. May cause irritation to the respiratory system. EYE CONTACT. May cause severe irritation to eyes. EYES, NOSE AND MOUTH. Repeated exposure may cause chronic eye irritation. SKIN. Mild dermatitis, allergic skin rash. Defatting, drying and cracking of skin.

Route of entry

Inhalation. Ingestion. Skin and/or eye contact.

Target Organs

Eyes Gastro-intestinal tract Respiratory system, lungs Skin

Medical Symptoms

Severe pulmonary irritation. General respiratory distress, unproductive cough. Nausea, vomiting.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1. Toxicity

No data available.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

Partition coefficient

Not determined.

12.4. Mobility in soil

Mobility:

The product is soluble in water.

12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Observe all local, national and international regulations.

13.1. Waste treatment methods

The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORT INFORMATION

General

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

ADR/RID/ADN Class

Not classified for transportation.

Transport Labels

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

Not applicable.

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

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Date 02/05/2013
Revision 1

Risk Phrases In Full
 R36/37/38 Irritating to eyes, respiratory system and skin.
 R42 May cause sensitisation by inhalation.

Hazard Statements In Full
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 H335 May cause respiratory irritation.

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