

SECTION 1: Identification and Supplier Details

- 1.1 Product identifier** **Enzyme PreSpray**
PRODUCT NAME: Formula code: 05-090801
- 1.2 Relevant identified uses:** General use, Carpet Cleaner
- 1.3 SUPPLIER:** The Restoration Group Limited, 53 Wakefield Street, Onekawa, Napier 4110
Phone: 06-835-0065
- 1.4 EMERGENCY CONTACT:** National Poisons Centre Phone: 0800-764-766

SECTION 2: Hazard(s) identification**2.1 Classification of the substance or mixture**

Enzyme PreSpray is Not classified as Dangerous Goods for Transport

Enzyme PreSpray is classified as hazardous according to criteria in the EPA Hazardous Substances (Minimum Degrees of Hazards) Notice 2017

HSNO Approval Number: HSR002530

Group Standard Allocation: Classification under the Group Standard Cleaning Products (Subsidiary Hazard) Group Standard 2017

6.3A skin corrosion/irritation

Remarks

For full text of H-phrases: see SECTION 16.

2.2 Label elements**Signal word****WARNING****Pictograms**

GHS07

**Hazard statements**

H315

Causes skin irritation.

Precautionary statements**Prevention :****P264**

Wash Hands thoroughly after handling.

P280

Wear protective gloves/eye protection/face protection.

Response:**P303 + P361 + P353**

IF ON SKIN: Wash with plenty of water.

Treatment:**P332 + P313**

If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Storage:

None

Disposal:

Completely emptied packages can be recycled.

2.3 Other hazards

SECTION 3: Composition / Information on ingredients**3.1 Substances**

not relevant (mixture)

3.2 Mixtures**3.2.1**

| Name of substance | Identifier | Wt% |
|-------------------------------------|------------------------|-----------|
| Sodium sulphate | CAS No 7757-82-6 | 50 - < 75 |
| Triphosphoric acid, sodium salt | CAS No 7758-29-4 | 25 - < 50 |
| Aqueous detergent | CAS No Trade Secret | 5 - < 15 |
| Dipropylene Glycol Monomethyl Ether | CAS No 34590-94-8 | 1 - < 5 |
| Diphosphoric acid, sodium salt | CAS No 7722-88-5 | 1 - < 5 |
| Sodium 2-Mercaptobenzothiazole | CAS No 2492-26-4 | < 1 |
| Fragrance | CAS No Trade Secret | < 1 |

For full text of abbreviations: see SECTION 16.

SECTION 4: First Aid Measures**4.1 Description of first aid measures****General notes**

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Brush off loose particles from skin. - Rinse skin with water/shower.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

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4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Fire Fighting Measures**5.1 Extinguishing media****Suitable extinguishing media**

water, foam, alcohol resistant foam, ABC-powder

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Deposited combustible dust has considerable explosion potential.

Hazardous combustion productsnitrogen oxides (NO_x), carbon monoxide (CO), carbon dioxide (CO₂)**5.3 Advice for firefighters**

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental Release Measures**6.1 Personal precautions, protective equipment and emergency procedures****For non-emergency personnel**

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose it.

6.3 Methods and material for containment and cleaning up**Advices on how to contain a spill**

Covering of drains. - Take up mechanically.

Advices on how to clean up a spill

Take up mechanically.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal precautions: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and Storage**7.1 Precautions for safe handling****Recommendations****Measures to prevent fire as well as aerosol and dust generation**

Use local and general ventilation. Take precautionary measures against static discharge. Use only in well-ventilated areas. Ground/bond container and receiving equipment.

Warning

Dust deposits may accumulate on all deposition surfaces in a technical room. The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

Advice on general occupational hygiene

Wash hands after use. Do not to eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities**Managing of associated risks****• Explosive atmospheres**

Removal of dust deposits.

Incompatible substances or mixtures

Observe compatible storage of chemicals.

Consideration of other advice**Ventilation requirements**

Use local and general ventilation.

Packaging compatibilities

Only packagings which are approved (e.g. acc. to DOT) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure Controls/Personal Protection**8.1 Control parameters****National limit values****Workplace Exposure Limits**

| Country | Name of agent | CAS No | Identifier | TWA [ppm] | TWA [mg/m ³] | STEL [ppm] | STEL [mg/m ³] | Source |
|---------|---|--------|------------|-----------|--------------------------|------------|---------------------------|-------------|
| NZ | particulates not otherwise regulated (PNOR) | | PEL | 1,766 | 15 | | | 29 CFR OSHA |
| NZ | particulates not otherwise regulated (PNOR) | | PEL | 529.5 | 5 | | | 29 CFR OSHA |

notation

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period unless otherwise specified.

TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average.

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Relevant DNELs/DMELs/PNECs and other threshold levels

No data available.

8.2 Exposure controls**Appropriate engineering controls**

General ventilation.

Individual protection measures (personal protective equipment)**Eye/face protection**

Wear eye/face protection.

Skin protection**• hand protection**

Wear protective gloves.

• other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

Particulate filter device (EN 143).

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and Chemical Properties**9.1 Information on basic physical and chemical properties****Appearance**

| | |
|----------------|---------------------|
| Physical state | solid (powder) |
| Color | different |
| Odor | Orange Citrus Aroma |

Other physical and chemical parameters

| | |
|---|-----------------------------|
| pH (value) | 9.3 |
| Melting point/freezing point | not determined |
| Initial boiling point and boiling range | 189.6 °C |
| Flash point | not applicable |
| Evaporation rate | not determined |
| Flammability (solid, gas) | |
| Explosion limits of dust clouds | not determined |
| Vapor pressure | 0.28 mmHg at 20 °C |
| Density | not determined |
| Relative density | not determined |
| Solubility(ies) | not determined |
| Auto-ignition temperature | not determined |
| Viscosity | not relevant (solid matter) |
| Explosive properties | none |
| Oxidizing properties | none |

SECTION 10: Stability and Reactivity**10.1 Reactivity**

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

Hints to prevent fire or explosion

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

Physical stresses which might result in a hazardous situation and have to be avoided

strong shocks

10.5 Incompatible materials

There is no additional information.

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological Information**11.1 Information on toxicological effects**

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)**Acute toxicity**

Shall not be classified as acutely toxic.

Acute toxicity estimate (ATE)

inhalation: dust/mist 4.356

Acute toxicity of components of the mixture

| Name of substance | CAS No | Exposure route | ATE |
|---------------------------------|-----------|-----------------------|--------|
| sodium sulphate | 7757-82-6 | inhalation: dust/mist | >2.4 |
| triphosphoric acid, sodium salt | 7758-29-4 | inhalation: dust/mist | >0.39 |
| diphosphoric acid, sodium salt | 7722-88-5 | oral | <2,000 |

Skin corrosion/irritation

Causes skin irritation.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Summary of evaluation of the CMR properties

Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant.

Carcinogenicity

- National Toxicology Program (United States): none of the ingredients are listed
- IARC Monographs none of the ingredients are listed

Specific target organ toxicity (STOT)

Shall not be classified as a specific target organ toxicant.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological Information**12.1 Toxicity**

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute)**Aquatic toxicity (acute) of components of the mixture**

| Name of substance | CAS No | Endpoint | Value | Species | Exposure time |
|-------------------------------------|------------|----------|-------------|-----------------------|---------------|
| sodium sulphate | 7757-82-6 | LC50 | 7,960 mg/l | fish | 96 hours |
| triphosphoric acid, sodium salt | 7758-29-4 | EC50 | >100 mg/l | aquatic invertebrates | 48 hours |
| Dipropylene Glycol Monomethyl Ether | 34590-94-8 | LC50 | >1,000 mg/l | fish | 96 hours |
| Dipropylene Glycol Monomethyl Ether | 34590-94-8 | ErC50 | >969 mg/l | algae | 72 hours |
| Dipropylene Glycol Monomethyl Ether | 34590-94-8 | EC50 | >969 mg/l | algae | 72 hours |

Aquatic toxicity (chronic)**Aquatic toxicity (chronic) of components of the mixture**

| Name of substance | CAS No | Endpoint | Value | Species | Exposure time |
|-------------------------------------|------------|----------|-------------|-----------------------|---------------|
| sodium sulphate | 7757-82-6 | LC50 | >8,080 mg/l | fish | 24 h |
| sodium sulphate | 7757-82-6 | EC50 | 1,698 mg/l | aquatic invertebrates | 7 d |
| triphosphoric acid, sodium salt | 7758-29-4 | LC50 | >1,850 mg/l | fish | 24 h |
| triphosphoric acid, sodium salt | 7758-29-4 | ErC50 | 160 mg/l | algae | 4 d |
| triphosphoric acid, sodium salt | 7758-29-4 | EC50 | 69.2 mg/l | algae | 4 d |
| Dipropylene Glycol Monomethyl Ether | 34590-94-8 | LC50 | >1,000 mg/l | aquatic invertebrates | 24 h |
| Sodium 2-Mercaptobenzothiazole | 2492-26-4 | EC50 | 857 mg/l | microorganisms | 3 h |

12.2 Persistence and degradability

Data are not available.

Degradability of components of the mixture

| Name of substance | CAS No | Process | Degradation rate | Time |
|-------------------------------------|------------|---------------------------|------------------|------|
| Dipropylene Glycol Monomethyl Ether | 34590-94-8 | oxygen depletion | 75 % | 10 d |
| Dipropylene Glycol Monomethyl Ether | 34590-94-8 | DOC removal | 96 % | 28 d |
| Dipropylene Glycol Monomethyl Ether | 34590-94-8 | carbon dioxide generation | 76 % | 28 d |

12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components of the mixture

| Name of substance | CAS No | BCF | Log KOW | BOD5/COD |
|-------------------------------------|------------|-----|---------|----------|
| sodium sulphate | 7757-82-6 | 0.5 | -4.38 | |
| Dipropylene Glycol Monomethyl Ether | 34590-94-8 | | 0.0043 | |
| Sodium 2-Mercaptoben-zothiazole | 2492-26-4 | | 2.42 | |

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Data are not available.

SECTION 13: Disposal Considerations**13.1 Waste treatment methods****Sewage disposal-relevant information**

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

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SECTION 14: Transport Information

- 14.1** UN number
- 14.2** UN proper shipping name not relevant
- 14.3** Transport hazard class(es)
Class -
- 14.4** Packing group not relevant
- 14.5** Environmental hazards none (non-environmentally hazardous acc. to the dangerous goods regulations)
- 14.6** Special precautions for user
There is no additional information.
- 14.7** Transport in bulk according to Annex II of MARPOL and the IBC Code
The cargo is not intended to be carried in bulk.

SECTION 15: Regulatory Information**15.1 Safety, health and environmental regulations****HSNO Approval Number:** HSR002530**Group Standard Allocation:** Classification under the Group Standard Cleaning Products (Subsidiary Hazard) Group Standard 2017**Hazard class**

6.3A Skin Corrosion / Irritation

This substance triggers:

| | |
|-------------------------|---------|
| Compliance Certificate: | N/A |
| Certified Handler: | N/A |
| Emergency Response Plan | 10,000L |
| Secondary Containment | 10,000L |
| Signage | 1,000L |

This substance is not required to be tracked. All workplace personnel handling this substance are required to be trained for the safe handling and PPE requirements for the hazards associated with this substance.

SECTION 16: Other information, including date of preparation or last revision
Abbreviations and acronyms

| Abbr. | Descriptions of used abbreviations |
|------------------|---|
| 29 CFR OSHA | 29 CFR §1910.1001 - Occupational Safety and Health Standards: Toxic and Hazardous Substances (permissible exposure limits) |
| ATE | Acute Toxicity Estimate |
| BCF | BioConcentration Factor |
| BOD | Biochemical Oxygen Demand |
| CAS | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances) |
| CLP | Regulation (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures |
| CMR | Carcinogenic, Mutagenic or toxic for Reproduction |
| COD | chemical oxygen demand |
| DMEL | Derived Minimal Effect Level |
| DNEL | Derived No-Effect Level |
| DOT | Department of Transportation (USA) |
| GHS | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations |
| HMIS | Hazardous Materials Identification System |
| IARC Mono-graphs | IARC Monographs on the Evaluation of Carcinogenic Risks to Humans |
| log KOW | n-octanol/water |
| MARPOL | International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant") |
| NFPA® 704 | National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States) |
| NPCA-HMIS® III | National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition |
| OSHA | Occupational Safety and Health Administration (United States) |
| PBT | Persistent, Bioaccumulative and Toxic |
| PEL | permissible exposure limit |
| PNEC | Predicted No-Effect Concentration |
| ppm | parts per million |
| STEL | short-term exposure limit |
| TWA | time-weighted average |
| vPvB | very Persistent and very Bioaccumulative |

Key literature references and sources for data

- OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200
- 49 CFR § 172.101 Hazardous Materials Table (DOT)

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards/Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

| Code | Text |
|------|------------------------|
| H315 | causes skin irritation |

Disclaimer

The information provided in this Safety Data Sheet relates only to the specific material designated herein. This Safety Data Sheet summarises our best knowledge of the health and safety hazard information of the product and how to safely handle the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including its use in conjunction with other products.

This substance is approved under HSNO for use as a cleaning chemical. All reasonable care has been taken to ensure that the information and advice contained herein are from sources believed to be reliable and to represent the most up-to-date knowledge available at the date given in Section 16. No liability is assumed for any damages related to the use or misuse of this substance.

All chemical materials may present unknown hazards as people have varying degrees of sensitivity to chemicals. Therefore, this product should be used with caution. The information herein is given in good faith, but no warranty, express or implied is made.

SDS Issued:

01 June 2025

Reason for Revision:

Update to New Zealand regulatory requirements.

References:

EPA NZ Chemical Classification and Information Database

EPA Guide: Assigning a Hazardous Substance to a Group Standard, 2014

Supplier SDS: Masterblend USA, Enzyme PreSpray

END OF SAFETY DATA SHEET