



SAFETY DATA SHEET: Astral Enzyme Drain Opener Issue 1: November 2022

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

1.1. Product identifier

- Product name: Astral Enzyme Drain Opener

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

- Identified uses: Wastewater treatment.
- Uses advised against: Potable water treatment.

1.3. Details of the safety data sheet

- Registered Company Name: **Worcestershire Chemicals Ltd**
- Address: Unit 6 Oakdale Trading Estate, Ham Lane, Kingswinford, Stourbridge, DY6 7JH
- Telephone: +44 (0) 1562 755884
- Email: info@chemi-kal.co.uk
- Emergency telephone number: 01562 755884 (Office Hours Only)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

This product does not meet the requirement for classification in any hazard class according to Regulation (EC) no 1272/2008 on classification, labelling and packaging of substances and mixture.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Not applicable.

2.3. Other hazards

Not classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

- Product is a mixture.

3.2. Mixtures

Composition:

Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting in this section, in accordance with EU or national regulations.

SECTION 4: FIRST AID MEASURES

- As a general rule, in case of doubt or if symptoms persist, always call a doctor.
- NEVER induce swallowing in an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation:

- In the event of massive inhalation, remove the person exposed to fresh air. Keep warm and at rest.
- If the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.
- If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

In the event of splashes or contact with eyes:

- Wash thoroughly with water for 15 minutes holding the eyelids open.
- If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin:

- Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.
- Watch out for any remaining product between skin and clothing, watches, shoes, etc.
- In the event of an allergic reaction, seek medical attention.
- If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing:

- Do not give the patient anything orally.
- In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.
- Seek medical attention immediately, showing the label.

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

- General information

The product is classified as non-hazardous however the following symptoms may occur. It is recommended to avoid exposure to vapours, mists or sprays. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

- Inhalation

May irritate the respiratory system.

- Ingestion

Nausea. Larger amounts may cause vomiting.

- Skin contact

May produce irritation in people with sensitive skin.

- Eye contact

May cause temporary irritation.

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

- Treat any exposure at source. In case of ingestion of large amounts, obtain immediate attention.

SECTION 5: FIREFIGHTING MEASURES

- Non-flammable.

5.1. Extinguishing media

- Water spray, dry powder, carbon dioxide or alcohol resistant foam.

Unsuitable extinguishing media

- Do not use water jet as this can spread the fire. Do not use carbon dioxide in enclosed spaces with insufficient ventilation.

5.2. Special hazards arising from the substance or mixture

- A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.
- Do not breathe in smoke.
- In the event of a fire, the following may be formed:

- carbon dioxide (CO₂)
- sulphur dioxide (SO₂)

5.3. Advice for firefighters

- Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

- Consult the safety measures listed under headings 7 and 8.

For non-fire-fighters

- Avoid inhaling the vapours.
- Avoid any contact with the skin and eyes.
- Spillages may leave slippery surfaces. Pedestrians and vehicles should take care on spillage areas.

For fire-fighters

- Fire-fighters will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

- The bacteria and carriers are naturally occurring and should not pose an environmental risk.

6.3. Methods and material for containment and cleaning up

- Wash to a collection drain point. Place in suitable labelled containers and hold for waste disposal. Wash spill site with water.

6.4. Reference to other sections

- Refer to sections 8 and 13 for additional information.

SECTION 7: HANDLING AND STORAGE

- Requirements relating to storage premises apply to all facilities where the mixture is handled.
- Individuals with a history of skin sensitisation should not, under any circumstance, handle this mixture.

7.1. Precautions for safe handling

- Always wash hands after handling.
- Remove and wash contaminated clothing before re-using.

Fire prevention:

- Handle in well-ventilated areas.
- Prevent access by unauthorised personnel.

Recommended equipment and procedures:

- For personal protection, see section 8.
- Observe precautions stated on label and also industrial safety regulations.
- Avoid inhaling vapours.
- Provide vapour extraction at the emission source and also general ventilation of the premises.
- Avoid skin and eye contact with this mixture.

Prohibited equipment and procedures:

- No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

- Store between 4°C and 25°C in a dry, well-ventilated place.

Storage

- Keep the container tightly closed in a dry, well-ventilated place.

Packaging

- Always keep in packaging made of an identical material to the original.

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

Occupational exposure limits:

None.

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

- Use personal protective equipment that is clean and has been properly maintained.
 - Store personal protective equipment in a clean place, away from the work area.
 - Never eat, drink or smoke during use. Remove and wash contaminated clothing before reusing.
- Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

- Avoid contact with eyes.
- Use eye protectors designed to protect against liquid splashes.

- Before handling, wear safety goggles with protective sides in accordance with standard EN166.
- In the event of high danger, protect the face with a face shield.
- Prescription glasses are not considered as protection.
- Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.
- Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

- Protective creams may be used for exposed skin, but they should not be applied after contact with the product.
- Gloves must be selected according to the application and duration of use at the workstation.

- Body protection

- Avoid skin contact.
- Wear suitable protective clothing.
- Work clothing worn by personnel shall be laundered regularly.
- After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

- Avoid breathing vapours.
- If the ventilation is insufficient, wear appropriate breathing apparatus.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information:

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|---|---|
| Appearance: | Water like liquid, dyed green. |
| Odour: | Citrus. |
| ph: | Neutral 6.0 - 9.0. |
| Melting point/Freezing point: | Similar to water. |
| Initial boiling point and boiling range: | Similar to water. |
| Evaporation rate: | Similar to water. |
| Flammability: | Not flammable under normal storage and handling conditions. |
| Upper/lower flammability or explosive limits: | n/a |
| Vapour pressure: | Similar to water. |
| Vapour density: | Similar to water. |
| Relative density: | 0.6 - 0.8 |
| Solubility: | Disperses in water. |
| Partition coefficient: | n/a |
| Auto-ignition temperature: | n/a |

| | |
|----------------------------|-------------------|
| Decomposition temperature: | n/a |
| Viscosity: | Similar to water. |
| Explosive properties: | n/a |
| Oxidising properties: | None |

9.2. Other information

- None.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

- No specific reactivity hazards under the recommended handling and storage conditions in Section 7.

10.2. Chemical stability

- This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

- Will not polymerise.

10.4. Conditions to avoid

- Avoid:
 - heat
 - exposure to light
 - accumulations of the mixture in enclosed places
 - generation of mist

10.5. Incompatible materials

- Strong oxidising agents
 - metals
 - strong bases
- Acids and alkalis may inactivate the bacterial cultures.

10.6. Hazardous decomposition products

- The thermal decomposition may release/form:
 - carbon dioxide (CO₂)
 - Sulphur dioxide (SO₂)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

- Animal testing has not been carried out, therefore there is no Toxicological Data specifically for this product. The Toxicological Data, where provided by the raw material manufacturer, can be made available on request.

Skin corrosion/skin irritation:

- May cause mild skin irritation.

Serious damage to eyes/eye irritation:

- May cause mild eye irritation.

Respiratory or skin sensitisation:

- May cause an allergic skin reaction.

Repeated dose toxicity

- Not known.

Carcinogenicity

- Not a carcinogen

Mutagenicity

- Negative.

Toxicity for reproduction

- Does not interfere with fertility.

SECTION 12: ECOLOGICAL INFORMATION**12.1. Toxicity****Mixtures**

- Animal testing has not been carried out, therefore there is no Toxicological Data specifically for this product. The Toxicological Data, where provided by the raw material manufacturer, can be made available on request.

12.2. Persistence and degradability

- Biodegradable.

12.3. Bioaccumulative potential

- Not likely.

12.4. Mobility in soil

- This product is expected to be mobile in soil.

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

- Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods**Waste:**

- Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

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Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company. Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging:

- Empty container completely. Keep label(s) on container.
- Give to a certified disposal contractor.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not classified for transportation.

14.4 Packaging Group

Not applicable.

14.5. Environmental hazards

Not applicable.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II or 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

Regulation (EC) No 648/2004 of the European Parliament and of the Council

The surfactants in this mixture comply with the biodegradability criteria in this Regulation.

Directive 2000/54/EC of the European Parliament and of the Council

This mixture contains "biological agents" as defined in Article 2 of the Directive. The biological agents within this mixture have been assessed as "group 1 biological agents" as required by the article 3 of the Directive.

15.2. Chemical safety assessment

- Information from the manufacturer of the raw materials has not been received regarding Chemical Safety Assessments, Exposure Scenarios or a Chemical Safety Report.

SECTION 16: OTHER INFORMATION

- Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.
- The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.
- It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.
- The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

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General rewrite

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Risk Phases in full See relevant section