GEARTH

# SAFETY DATA SHEET
## EcoSolve

GHS REV 10

## 1 Identification

| | |
|---|---|
| Product identifier | EcoSolve |
| Other means of identification | No data available |
| Recommended use | Eco-friendly solvent cleaner — proprietary surfactant blend with natural terpenes. |
| Restrictions on use | No data available |
| Supplier | GEARTH (Pty) Ltd, 96 Lazy River Road, Centurion 0157, Gauteng, South Africa |
| Telephone | 012 004 8183 \| info@gearth.co.za |
| Emergency telephone number | **066 214 2274 (24 hours)** |

## 2 Hazards identification

### 2.1 Classification of the substance or mixture

| | |
|---|---|
| GHS classification | Not classified under GHS Rev 10 by the source data. Source lists pre-GHS risk phrases including R20/21/22/23/24/25, R36/37/38/41/43 for hazardous components; irritant vapour noted. |

### 2.2 Label elements

| | |
|---|---|
| Hazard pictograms | No data available |
| Signal word | No data available |
| Hazard statements | No data available |
| Precautionary — prevention | Wear respiratory equipment (inorganic cartridge) and eye protection when handling (source data). |
| Precautionary — response | No data available |
| Precautionary — storage | No data available |
| Precautionary — disposal | No data available |

### 2.3 Other hazards

**OTHER HAZARDS DISCLOSURE**

Contains methyl alcohol (<1%), isopropyl alcohol (<10%) and natural terpenes (<5%); vapour is irritant. Explosive only if heated in confinement (source data).

## 3 Composition / information on ingredients

| Ingredient | CAS no. | EC no. | Conc. % (w/w) | Classification |
|---|---|---|---|---|
| Sodium metasilicate pentahydrate | 10213-79-3 | No data available | <5% | OSHA hazard: yes (source, pre-GHS) |
| Methyl alcohol | 67-56-1 | No data available | <1% | OSHA hazard: yes (source, pre-GHS) |
| Natural terpenes (d-limonene) | 138-86-3 | No data available | <5% | OSHA hazard: yes (source, pre-GHS) |
| Isopropyl alcohol | 67-63-0 | No data available | <10% | OSHA hazard: yes (source, pre-GHS) |
| **Total** | | | **100** | |

Exact composition percentages are withheld as a trade secret in accordance with the HCA Regulations, 2021. The classification of withheld components is reflected above.

## 4 First-aid measures

### 4.1 Description of first-aid measures

| | |
|---|---|
| Inhalation | Supply fresh air; consult a doctor in case of symptoms. |
| Skin contact | Immediately wash with soap and water and rinse thoroughly. |
| Eye contact | Rinse opened eye for several minutes under running water. |
| Ingestion | In case of persistent symptoms consult a doctor. |

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

| | |
|---|---|
| Symptoms and effects | Irritant vapour; very irritant to eyes; no immediate skin irritant effect. |

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

| | |
|---|---|
| Medical attention | Treat symptomatically. |

## 5 Fire-fighting measures

### 5.1 Extinguishing media

| | |
|---|---|
| Suitable extinguishing media | Conventional firefighting measures are appropriate. |
| Unsuitable extinguishing media | No data available |

### 5.2 Special hazards arising from the substance or mixture

| | |
|---|---|
| Specific hazards / hazardous combustion products | Explosive only if heated in confinement; not flammable in form as supplied. |

### 5.3 Advice for firefighters

| | |
|---|---|
| Protective equipment for firefighters | No data available |

## 6 Accidental release measures

| | |
|---|---|
| Personal precautions, protective equipment and emergency procedures | Wear respiratory equipment and protective clothing. |
| Environmental precautions | Should not be discharged into water courses without prior consultation and authorisation. |
| Methods and material for containment and cleaning up | Absorb with liquid-binding material (sand, sawdust, cotton waste); incinerate. Smaller amounts of contaminated binding material can be disposed of with municipal waste. |

## 7 Handling and storage

### 7.1 Precautions for safe handling

| | |
|---|---|
| Safe handling | Wear respiratory equipment (inorganic cartridge) and eye protection. No special measures required against explosion and fire. |

### 7.2 Conditions for safe storage, including any incompatibilities

| | |
|---|---|
| Storage conditions | No special storeroom requirements. Protect from frost and direct sunlight. |
| Packaging | 5 L, 25 L and 200 L drums. |
| Shelf life | Minimum 12 months from date of manufacture. |
| Incompatibilities | No data available |

## 8 Exposure controls / personal protection

### 8.1 Control parameters — occupational exposure limits

| Substance | OEL type | Value | Source |
|---|---|---|---|
| Product as supplied | — | None established | HCA Regs 2021 Annexure 2 |

### 8.2 Appropriate engineering controls

| | |
|---|---|
| Engineering controls | No components with critical values requiring workplace monitoring (source data). |

### 8.3 Individual protection measures

| | |
|---|---|
| Eye / face protection | Safety glasses recommended during handling. |
| Skin / hand protection | Protective gloves and protective work clothing. Glove material: No data available; breakthrough time: No data available |
| Respiratory protection | Respirator required when handling. Filter type: Inorganic cartridge |
| Thermal hazards | No data available |

## 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| Physical state | Liquid |
| Colour | Orange-amber to brown, transparent |
| Odour | No data available |
| Melting point / freezing point | Not applicable per source |
| Boiling point or initial boiling point and boiling range | Approx. 80 °C |
| Flammability | Not flammable in form as supplied |
| Lower and upper explosion limit / flammability limit | No data available |
| Flash point | Not flammable in form as supplied |
| Auto-ignition temperature | No data available |
| Decomposition temperature | No data available |
| pH (concentration and temperature stated) | 9.2 – 9.8 at 20 °C (concentration not stated in source data) |
| Kinematic viscosity | No data available |
| Solubility | Fully soluble in water |
| Partition coefficient n-octanol/water (log Kow) | No data available |
| Vapour pressure | Not determined (source data) |
| Density and/or relative density | Relative density 0.86 – 0.88 g/cm³ |
| Relative vapour density | No data available |
| Particle characteristics | Not applicable |

### 9.2 Other information

| | |
|---|---|
| Explosive properties | Only if heated in confinement (source data) |
| Oxidising properties | No data available |
| Bulk density | No data available |
| Active solids | Solid content 80 – 90%; organic solvent content 10 – 20% (source data) |

## 10 Stability and reactivity

| | |
|---|---|
| Reactivity | No data available |
| Chemical stability | The product is stable. |
| Possibility of hazardous reactions | None known. |
| Conditions to avoid | Excessive heat (above +40 °C) and freezing; repeated freezing and thawing. |
| Incompatible materials | No data available |
| Hazardous decomposition products | None if used as recommended. |

## 11 Toxicological information

| | |
|---|---|
| Likely routes of exposure | Inhalation of vapour; eye and skin contact; ingestion. |
| Symptoms related to exposure | Irritant vapour; very irritant effect on eyes; no immediate irritant effect on skin. |
| Delayed and chronic effects | No data available |

### Numerical measures of toxicity

| Endpoint | Species | Route | Value |
|---|---|---|---|
| No data available | No data available | No data available | No data available |

Source states no LD50/LC50 values relevant for classification are available.

| | |
|---|---|
| Acute toxicity — dermal | No data available |
| Acute toxicity — inhalation | No data available |
| Skin corrosion / irritation | No immediate irritant effect (source data). |
| Serious eye damage / irritation | Very irritant effect (source data; not classified). |
| Respiratory sensitisation | No sensitising effect known (source data). |
| Skin sensitisation | No sensitising effect known (source data). |
| Germ cell mutagenicity | No data available |
| Carcinogenicity | No data available |
| Reproductive toxicity | No data available |
| STOT — single exposure | No data available |
| STOT — repeated exposure | No data available |
| Aspiration hazard | No data available |

## 12 Ecological information

**Aquatic toxicity**

| Species | Endpoint | Value | Duration |
|---|---|---|---|
| No data available | No data available | No data available | No data available |

Source: properly discharged effluent is not expected to interfere with activated-sludge organisms; product does not influence the AOX value of effluent water; no heavy metals (EC 76/464).

| | |
|---|---|
| Persistence and degradability — method | OECD 301 (BOC elimination) |
| Persistence and degradability — result | Degree of elimination >70%; eliminated in wastewater treatment plants by physical and biological means. |
| Bioaccumulative potential | No data available |
| Mobility in soil | No data available |
| Other adverse effects | Water hazard class 2 (self-assessment): hazardous for water in concentration (source data). |

## 13 Disposal considerations

| | |
|---|---|
| Waste residues | No data available |
| Disposal methods | Always consult local legislative by-laws. If in doubt, hand over to a specifically authorised hazardous-waste treatment plant. |
| Contaminated packaging | Packaging can be reused or recycled after cleaning with water (with cleaning agent if necessary). |
| Waste classification (NEM:WA 59 of 2008, GN R635) | No data available |

## 14 Transport information

| Mode | UN no. | Proper shipping name | Class | PG |
|---|---|---|---|---|
| Road (SANS 10228 / ADR) | Not applicable | Not regulated | Not applicable | Not applicable |
| Rail (RID) | Not applicable | Not regulated | Not applicable | Not applicable |
| Sea (IMDG) | Not applicable | Not regulated | Not applicable | Not applicable |
| Air (IATA) | Not applicable | Not regulated | Not applicable | Not applicable |

| | |
|---|---|
| Marine pollutant | No (source data). |
| Transport in bulk (IMO instruments) | Not applicable |
| Special precautions for user | No data available |

## 15 Regulatory information

| | |
|---|---|
| Safety, health and environmental regulations specific to the product | Occupational Health and Safety Act 85 of 1993; Regulations for Hazardous Chemical Agents, 2021; NEM:WA 59 of 2008; None identified |
| NRCS VC 8054 status | No data available |
| Ecolabel certification | No data available |
| Chemical safety assessment | No data available |

## 16 Other information

| | |
|---|---|
| Date of preparation | 18 August 2026 |
| Latest revision | Rev 1.0, 18 August 2026 |
| Summary of changes | First GEARTH issue (Rev 1.0). Safety content transferred unchanged from the source manufacturer's MSDS (dated 5 April 2024; source product Eco-Solve 5 Plus); no data re-tested or re-derived. |
| Full text of hazard (H) statements | No data available |
| Full text of precautionary (P) statements | No data available |
| Key to abbreviations | GHS — Globally Harmonized System; OEL — occupational exposure limit; STOT — specific target organ toxicity; PG — packing group; SG — specific gravity; CAS — Chemical Abstracts Service; HCA — hazardous chemical agents. |
| Classification method | Hazard information carried over from the source manufacturer's assessment (pre-GHS format). Classification against UN GHS Rev 10 criteria to be confirmed. |
| Training advice | Use only according to the instructions for use. Personnel handling the concentrate should be familiar with the first-aid and spill measures in Sections 4 and 6. |
| Disclaimer | This information is based on present knowledge and describes the product for the purposes of health, safety and environmental requirements only. It does not constitute a guarantee of the properties of the product. Final determination of suitability for any use is the sole responsibility of the user. |

**SIGN-OFF**

| | |
|---|---|
| Prepared by | GEARTH (Pty) Ltd |
| Document ref | SDS-GEA-008 |
| Revision | 1.0 (18 August 2026) |
| Supersedes | None — first GEARTH issue |
| Next review | August 2028 |