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# SAFETY DATASHEET

# TIMBERSEAL

ISSUED: 3/10/2023
PRINTED: 3/10/2023

RED WOLF LIMITED encourages and expects users to read and understand this entire SDS, as there is important information throughout this document. We expect safety recommendations to be followed unless the use conditions necessitate other appropriate methods or actions.

## SECTION 1: IDENTIFICATION

**PRODUCT NAME:** TIMBERSEAL
**OTHER NAMES:** Silicone emulsion
**MANUFACTURER'S CODE:** TS1-1000

**USE:** Silane/siloxane ready-to-use emulsion as a water repellent impregnant for neutral substrates such as timber, paper, or fabric.

**COMPANY INFORMATION:**
Red Wolf Ltd
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## SECTION 2: HAZARD/S IDENTIFICATION

**GHS CLASSIFICATION:**
Skin Irritation Category 2
Serious Eye Damage Category 1
Hazardous to the Aquatic Environment Chronic Category 3

**GHS LABEL ELEMENTS:**

**HAZARD PICTOGRAMS:**

**SIGNAL WORD:** **DANGER**

| | | |
|---|---|---|
| **HAZARD STATEMENTS:** | H315 | Causes Skin Irritation |
| | H318 | Causes Serious Eye Damage |
| | H412 | Harmful to Aquatic Life with Long Lasting Effects |

**PRECAUTIONARY STATEMENTS:**

| | | |
|---|---|---|
| **PREVENTION:** | P264 | Wash hands thoroughly after handing |
| | P273 | Avoid release to the environment |
| | P280 | Wear protective gloves / protective clothing / eye protection / face protection |
| **RESPONSE:** | P302 + P352 | If on skin, wash with plenty of soap and water |
| | P305 + P351 + P338 | If in eyes, rinse cautiously with water for several minutes. Remove contact lenses if easy to do so. Continue rinsing. |
| | P310 | Immediately call a POISONS CENTRE or doctor / physician |
| | P332 + P313 | If skin irritation occurs, get medical advice / attention |
| | P362 + P364 | Take off contaminated clothing and wash before reuse |
| **STORAGE:** | NIL | |
| **DISPOSAL:** | P501 | Dispose of contents / container to authorised hazardous waste collection facility in accordance with local regulations. |

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Composition of mixture

| CAS No. | % (weight) | Name |
|---|---|---|
| 102782-92-3 | <10 | polydimethylaminosiloxane |
| 71750-79-3 | <10 | polydimethylaminosiloxane |
| 2943-75-1 | <10 | octyltriethoxysilane |

Note: Non-hazardous ingredients have been omitted.

## SECTION 4: FIRST AID MEASURES

Description of first aid measures

| | |
|---|---|
| **EYE CONTACT** | Rinse eyes cautiously with clean water for several minutes. After the initial flush, remove contact lenses if easy to do. Continue flushing with clean water. If effects occur, seek medical attention, preferably from an Ophthalmologist. |
| **SKIN CONTACT** | Remove contaminated clothing and wash exposed skin with plenty of soap and water. If skin irritation persists, seek medical attention. |
| **INGESTION** | Immediately drink a glass of water and rinse the mouth thoroughly. First aid is generally not required, but if symptoms arise, or you are concerned, call a POISONS CENTRE or seek medical advice. |

**ADVICE FOR MEDICAL PROFESSIONALS:** Treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

**EXTINGUISHING MEDIA:** Water spray or fog
Foam
Dry chemical powder
BCF (Where regulations permit)
Carbon dioxide
Sand

**UNSUITABLE EXTINGUISHING MEDIA:**
High volume water jet

**SPECIAL HAZARDS ARISING FROM THE MIXTURE:**
None known

**ADVICE FOR FIREFIGHTERS:**

- Wear full body protective clothing with breathing apparatus.
- Evacuate area.
- Use water spray to cool unopened containers and fire affected zone until fire is extinguished and danger of reignition has passed.
- Do not use a solid water stream as it may spread the fire.
- Use extinguishing measures that are appropriate to the circumstances and the surrounding environment.
- Remove undamaged containers from the fire zone if safe to do so.
- Collect contaminated fire extinguishing water separately. Do not discharge to drains.

- Fire residues and fire extinguishing water must be disposed of in accordance with local regulations.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:**
See Section 8

**ENVIRONMENTAL PRECAUTIONS:**
See Section 12

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:**

| | |
|---|---|
| **MINOR SPILLS** | ❖ Clean up all spills immediately<br>❖ Avoid contact with skin and eyes<br>❖ Use personal protective equipment (See section 8)<br>❖ Contain and absorb spill with inert material such as sand, earth, or vermiculite<br>❖ Place in a suitable, labelled waste container for waste disposal |
| **MAJOR SPILLS** | ❖ Clear area of personnel<br>❖ Alert Fire and Emergency and advise them of the nature and location of the spill<br>❖ Wear suitable protective equipment<br>❖ Prevent, by any means, from entering drains and waterways<br>❖ Stop the leak if safe to do so<br>❖ Contain spill with sand, earth or vermiculite<br>❖ Collect recoverable product into labelled containers for recycling<br>❖ Absorb remaining product with sand, earth or vermiculite<br>❖ Collect contaminated absorbent media into labelled containers for disposal |

## SECTION 7: HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:**

- ❖ Avoid contact with skin or clothing
- ❖ Avoid contact with eyes
- ❖ Do not ingest (do not swallow)
- ❖ Take care to prevent spills and release into the environment
- ❖ Wear protective equipment when a risk of contact exists
- ❖ Handle in accordance with good industrial hygiene and safety practices
- ❖ Treat empty containers as hazardous due to the possibility of residue remaining

**CONDITIONS FOR SAFE STORAGE:**

- ❖ Keep in properly labelled original containers
- ❖ Store in a cool, well-ventilated place out of direct sunlight
- ❖ Do not store alongside explosives

# SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

**EXPOSURE STANDARDS:** There is no data allocated to this product.

**PERSONAL PROTECTION EQUIPMENT:**
The following items of personal protection equipment are recommended when handling this product:

- Safety glasses with side shields, or chemical goggles meeting AS/NZS 1337.1
- Chemical gloves meeting AS/NZS 2161.10 (e.g., Butyl, PVC, or latex rubber)
- If used in an unventilated area, a half-face respirator should be used to prevent excessive vapour inhalation
- Protective clothing to prevent contact with the skin in the event of a splash, e.g.,
  - Overalls
  - PVC apron
- Closed footwear

**SPECIAL HAZARDS:** Contact lenses may pose a special hazard. Soft contact lenses can absorb and concentrate hazardous vapours and irritants. At the first sign of irritation or redness, the wearer should be removed to a clean zone, thoroughly wash their hands with soap and water, then remove the contact lenses. If irritation persists, see section 4.

**OTHER PROTECTIVE EQUIPMENT:**

- An eye wash station, or clean water supply should be available near the worksite to allow for flushing of eyes in the event of eye contact.
- Barrier cream or skin cleansing cream may be made available to protect against and respond to the degreasing effect caused by skin contact.

# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**INFORMATION ON THE BASIC PHYSICAL AND CHEMICAL PROPERTIES OF THE MIXTURE**

| | | | |
|---|---|---|---|
| **APPEARANCE** | White | **RELATIVE DENSITY (WATER=1)** | No data |
| **PHYSICAL STATE** | Liquid | **PARTITION COEFFICIENT N-OCTANOL / WATER** | No data |
| **ODOUR** | No data | **AUTO-IGNITION TEMPERATURE (°C)** | No data |
| **ODOUR THRESHOLD** | No data | **DECOMPOSITION TEMPERATURE (°C)** | No data |
| **pH (as supplied)** | 7-9 | **VISCOSITY (cSt)** | No data |
| **MELTING POINT / FREEZING POINT** | No data | **MOLECULAR WEIGHT (g/mol)** | 1 |
| **BOILING POINT & BOILING RANGE** | ≥ 100°C | **TASTE** | N/A |
| **FLASH POINT** | N/A | **EXPLOSIVE PROPERTIES** | No data |
| **EVAPORATION RATE** | No data | **OXIDISING PROPERTIES** | No data |
| **FLAMMABILITY** | N/A | **SURFACE TENSION (mN/m)** | No data |
| **UPPER EXPLOSIVE LIMIT** | No data | **VOLATILE COMPONENT (%vol)** | No data |
| **LOWER EXPLOSIVE LIMIT** | No data | **GAS GROUP** | N/A |
| **VAPOUR PRESSURE (kPa)** | No data | **pH AS A SOLUTION (1%)** | 7-9 |
| **SOLUBILITY IN WATER** | Miscible | **VOC g/L** | No data |
| **VAPOUR DENSITY** | No data | | |

## SECTION 10: STABILITY AND REACTIVITY

**REACTIVITY:** None known

**CHEMICAL STABILITY:** Product is considered stable under normal conditions
Hazardous polymerisation will not occur

**POSSIBILITY OF HAZARDOUS REACTIONS:** None known

**CONDITIONS TO AVOID:** Heat may cause separation of constituent ingredients rendering the product ineffective for its purpose.
Avoid contact with oxidising materials
Avoid contact with strong acids and bases

**INCOMPATIBLE MATERIALS:** Can react with strong oxidising agents, acids and bases

**HAZARDOUS DECOMPOSITION PRODUCTS:** None known

## SECTION 11: TOXICOLOGICAL INFORMATION

**INFORMATION ON TOXICOLOGICAL EFFECTS (WHEN KNOWN)**

**EXPOSURE ROUTES:** Eye contact
Skin contact

**ACUTE ORAL TOXICITY:** Not known to be toxic if swallowed. Harmful effects not anticipated if small amounts are swallowed. LD50 not determined.

**ACUTE DERMAL TOXICITY**: Prolonged skin contact is not expected to result in the absorption of harmful amounts of this product. The dermal LD50 has not been determined.
**INFORMATION FOR COMPONENTS**:
**Triethoxyoctylsilane**
LD50 Rabbit – female – 8000mg/kg OECD 402 or equivalent
LD50 Rabbit – male – 6730mg/kg OECD 402 or equivalent

**ACUTE INHALATION TOXICITY:** No adverse effects are anticipated from single exposure to vapour. The LC50 has not been determined.
**INFORMATION FOR COMPONENTS**:
**Triethoxyoctylsilane**
LC50 Rat – male and female – 4 hrs, vapour, >22ppm OECD test guideline 403. No deaths occurred at this concentration.

**SKIN CORROSION/IRRITATION:** Based on information available for the component ingredients, this product is a category 2 skin irritant. This product may cause reversible damage to the skin following exposure for up to 4 hours.

This may involve redness and skin irritation. See section 4 for first aid recommendations.

**SERIOUS EYE DAMAGE / EYE IRRITATION:**

Based on information available for the component ingredients, this product may cause category 1 eye damage. Category 1 eye damage occurs when a product produces (in at least one tested animal) effects on the cornea, iris, or conjunctiva, that are not expected to reverse, or have not fully reversed within an observation period of 21 days; and/or at least in 2 of 3 tested animals, a positive response of: (i) corneal opacity ≥3; and/or (ii) iritis >1.5; calculated as the mean scores following grading at 24, 48 and 72 hours after instillation of the substance.

See section 8 for prevention measures and section 4 for first aid response.

**SENSITISATION (SKIN AND RESPIRATORY):**

Not classified based on available information

**INFORMATION FOR COMPONENTS**:

**Triethoxyoctylsilane**

Did not cause allergic reaction in Guinea Pigs

**SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (SINGLE EXPOSURE):**

Not classified based on available information.

**ASPIRATION HAZARD:** Not classified based on available information.

**SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (REPEATED EXPOSURE):**

Not classified based on available information.

**CARCENOGENICITY:** Not classified based on available information.

**TERATOGENICITY:** Not classified based on available information.

**REPRODUCTIVE TOXICITY:** Not classified based on available information.

**MUTAGENICITY:** Not classified based on available information.

## SECTION 12: ECOLOGICAL INFORMATION

**ECOTOXICITY:**

This product has been classified as hazardous to the aquatic environment chronic category 3, based upon test data from one or more of its constituent ingredients. No testing has been completed on this product.

***INFORMATION FOR COMPONENTS:***

***TRIETHOXYOCTYLSILANE***

**Acute toxicity to fish**

Not expected to be acutely toxic to aquatic organisms.

No toxicity at the limit of solubility
LC50, Oncorhynchus mykiss (rainbow trout), flow-through, 96 hrs, > 0.055 mg/l, OECD Test Guideline 203 or Equivalent

**Acute toxicity to aquatic invertebrates**
No toxicity at the limit of solubility
EC50, Daphnia magna (Water flea), flow-through test, 48 hrs, > 0.049 mg/l, OECD Test Guideline 202 or Equivalent

**Acute toxicity to algae/aquatic plants**
No toxicity at the limit of solubility
ErC50, Pseudokirchneriella subcapitata (green algae), static test, 72 hrs, Growth rate inhibition, > 0.13 mg/l, OECD Test Guideline 201 or Equivalent
No toxicity at the limit of solubility
NOEC, Pseudokirchneriella subcapitata (green algae), static test, 72 hrs, Growth rate inhibition, > 0.13 mg/l, OECD Test Guideline 201 or Equivalent

**Toxicity to bacteria**
EC50, activated sludge, 3 Hour, Respiration rates., > 1,000 mg/l, activated sludge test (OECD 209)

**Chronic toxicity to fish**
No toxicity at the limit of solubility
NOEC, Fathead minnow (Pimephales promelas), 32 d, mortality, > 0.036 mg/l

**Chronic toxicity to aquatic invertebrates**
No toxicity at the limit of solubility
NOEC, Daphnia magna (Water flea), 21 d, number of offspring, >= 0.199 mg/l

**PERSISTENCE AND DEGRADABILITY:**

No data available.

***INFORMATION FOR COMPONENTS:***

***TRIETHOXYOCTYLSILANE***

**Biodegradability:** Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.
10-day Window: Fail
**Biodegradation:** 31.5 %
**Exposure time:** 28 d
**Method:** OECD Test Guideline 301D or Equivalent
**Stability in Water (1/2-life)**, 30 Hour, pH 7, Half-life Temperature 20 °C, Estimated.

**BIOACCUMULATIVE POTENTIAL:**

No data available

***INFORMATION FOR COMPONENTS:***

***TRIETHOXYOCTYLSILANE***

**Bioaccumulation:** Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).
**Partition coefficient: n-octanol/water(log Pow):** 6.41 OECD Test Guideline 117 or Equivalent
**Bioconcentration factor (BCF):** 1,890 Carp (Cyprinus carpio) 56 d OECD Test Guideline 305 or Equivalent

**MOBILITY IN SOIL:**

***INFORMATION FOR COMPONENTS:***

***TRIETHOXYOCTYLSILANE***

**Partition coefficient (Koc):** > 5000 Estimated.
**Results of PBT and vPvB assessment**
This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**OTHER ADVERSE EFFECTS:** No data available.

***INFORMATION FOR COMPONENTS:***

***TRIETHOXYOCTYLSILANE***

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

## SECTION 13: DISPOSAL CONSIDERATIONS

**DISPOSAL METHODS:**

Treat all unwashed containers as hazardous. Do not allow product waste to enter drains or waterways. Do not re-use containers for any purpose (other than by destructive recycling). Dispose of unwanted product waste and contaminated containers at an authorised hazardous waste facility. Washed containers may be submitted to waste facilities for recycling.

Always dispose of products in accordance with local regulations and bylaws.

## SECTION 14: TRANSPORT INFORMATION

**LABELS REQUIRED: NIL**

**LAND TRANSPORT (UN):** **NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS**

**AIR TRANSPORT (ICAO-IATA / DGR):** **NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS**

**SEA TRANSPORT (IMDG-Code / GGVSee):** **NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS**

**TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL AND THE IBC CODE:** **NOT APPLICABLE**

**TRANSPORT IN BULK IN ACCORDANCE WITH MARPOL ANNEX V AND THE IMSBC CODE:** **NOT APPLICABLE**

**TRANSPORT IN BULK IN ACCORDANCE WITH THE IGC CODE:** **NOT APPLICABLE**

## SECTION 15: REGULATORY INFORMATION

**THIS SUBSTANCE IS TO BE MANAGED USING THE CONDITIONS SPECIFIED IN THE APPLICABLE GROUP STANDARD IDENTIFIED BELOW.**

HSR 002670 – Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2020

All ingredients in this product appear on the New Zealand Inventory of Chemicals (NZIoC). Ingredients in this product also appear on lists under the New Zealand Hazardous Substances and New Organisms (HSNO) Act – Classification of Chemicals; and Classification Data.

## SECTION 16: OTHER INFORMATION

To the best of our knowledge, the information sources for the preparation of this document were correct and complete at the time of writing. The information is therefore subject to possible change from time to time and cannot be guaranteed. This document should be taken as a safety guide for the product and its recommended uses but is in no way an absolute authority. Please consult the relevant legislation governing the use and storage of this type of product or any material existing within the product. For further information, please contact Red Wolf Limited.