Red Wolf Ltd
Applied Industrial Science
61 Hillside Road, Wairau Valley
Auckland 0627, New Zealand
Telephone: +64 9 353 8414 (all hours)
Free Call (NZ only): 0800 538 414
E-mail: sales@redwolfnz.co.nz

# SAFETY DATASHEET

# TILE AND GROUT SEALER

ISSUED: 5/10/2023
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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:** TILE AND GROUT SEALER

**OTHER NAMES:** NIL

**MANUFACTURER'S CODE:** TGS1-1000

**USE:** Solvent-based silane/siloxane ready-to-use emulsion as a penetrating water repellent impregnant for tiles, grout, and dense masonry or stone surfaces.

**COMPANY INFORMATION:**

Red Wolf Ltd
61 Hillside Road
Wairau Valley
Auckland 0627
New Zealand

| | |
|---|---|
| Product information phone: | 0800 538 414 |
| 24-hour emergency contact: | +64 9 3538 414 |
| National Poisons Centre: | 0800 764 766 |
| Website | www.redwolfnz.co.nz |
| Email: | sales@redwolfnz.co.nz |

## SECTION 2: HAZARD/S IDENTIFICATION

**GHS CLASSIFICATION:**

Flammable Liquids Category 4
Skin Irritation Category 2
Serious Eye Damage Category 1
Germ Cell Mutagenicity Category 1
Reproductive Toxicity Category 2
Specific Target Organ Toxicity – Single Exposure Category 3
Aspiration Hazard Category 1
Hazardous to the Aquatic Environment Chronic Category 2

**GHS LABEL ELEMENTS:**

**HAZARD PICTOGRAMS:**

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

| | | |
|---|---|---|
| **HAZARD STATEMENTS:** | H227 | Combustible Liquid |
| | H304 | May be Fatal if Swallowed and Enters Airways |
| | H315 | Causes Skin Irritation |
| | H318 | Causes Serious Eye Damage |
| | H335 | May Cause Respiratory Irritation |
| | H336 | May Cause Drowsiness or Dizziness |
| | H340 | May Cause Genetic Defects |
| | H361 | Suspected of Damaging Fertility or the Unborn Child |
| | H411 | Toxic to Aquatic Life with Long Lasting Effects |

**PRECAUTIONARY STATEMENTS:**

| | | |
|---|---|---|
| **PREVENTION:** | P201 | Obtain special instructions before use |
| | P202 | Do not handle until all safety precautions have been read and understood |
| | P210 | Keep away from heat/sparks/open flames/hot surfaces. - No smoking |
| | P261 | Avoid breathing fume/mist/vapours/spray |
| | P264 | Wash hands thoroughly after handing |
| | P271 | Use only outdoors or in a well-ventilated area |
| | P273 | Avoid release to the environment |
| | P280 | Wear protective gloves / protective clothing / eye protection / face protection |
| **RESPONSE:** | P301+P310 | IF SWALLOWED: Immediately call a POISONS CENTRE or doctor / physician |
| | P302 + P352 | If on skin, wash with plenty of soap and water |
| | P304 + P340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing |
| | P305 + P351 + P338 | If in eyes, rinse cautiously with water for several minutes. Remove contact lenses if easy to do so. Continue rinsing. |
| | P308 + P313 | IF exposed or concerned: Get medical advice / attention |
| | P310 | Immediately call a POISONS CENTRE or doctor / physician |
| | P312 | Call a POISON CENTER or doctor/physician if you feel unwell |
| | P331 | Do NOT induce vomiting |
| | P332 + P313 | If skin irritation occurs, get medical advice / attention |
| | P362 + P364 | Take off contaminated clothing and wash before reuse |
| | P370 + P378 | In case of fire: Use water fog, foam, dry chemical, or carbon dioxide for extinction |
| | P391 | Collect spillage |

| | | |
|---|---|---|
| **STORAGE:** | P403 | Store in a well-ventilated place |
| | P233 | Keep container tightly closed |
| | P405 | Store locked up |
| **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 | 10-30 | polydimethylaminosiloxane |
| 71750-79-3 | <10 | polydimethylaminosiloxane |
| 2943-75-1 | <10 | octyltriethoxysilane |
| 77-58-7 | <10 | Dibutyl dilaurate tin |
| 64742-48-9 | >60 | Naphtha (petroleum), hydrotreated heavy |

Note: Non-hazardous ingredients have been omitted.

## SECTION 4: FIRST AID MEASURES

For advice, contact the National Poisons Centre (Phone New Zealand: 0800 764 766) or a doctor.

Description of first aid measures:

| | |
|---|---|
| **INHALATION** | Move the victim to fresh air and keep at rest in a position comfortable for breathing. For those providing assistance, avoid exposure to yourself or others - use respiratory protection. Begin artificial respiration if breathing has stopped. If respiratory irritation, dizziness, nausea or unconsciousness occurs, seek immediate medical assistance. |
| **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/HAIR CONTACT** | If skin contact occurs, remove contaminated clothing and wash skin with soap and water. If skin irritation occurs, get medical advice. Launder contaminated clothing before re-use. |
| **INGESTION** | If swallowed, do NOT induce vomiting. Obtain immediate medical advice. If vomiting occurs spontaneously, keep head below hips to prevent aspiration into lungs. |
| | |

| | |
|---|---|
| **MOST IMPORTANT SYMPTOMS AND EFFECTS** | Repeated exposure may cause skin dryness or cracking. Mildly irritating to skin. May be irritating to the eyes, nose, throat and lungs. |
| **FIRST AID FACILITIES** | Provide eye baths and safety showers |
| **MEDICAL ATTENTION** | Treat according to symptoms. Avoid gastric lavage: risk of aspiration of product to the lungs with the potential to cause chemical pneumonitis. |

## SECTION 5: FIREFIGHTING MEASURES

Shut off product that may 'fuel' a fire if safe to do so. Allow trained personnel to attend a fire in progress, providing firefighters with this Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.

**SUITABLE EXTINGUISHING MEDIA**
Water fog, foam, dry chemical or carbon dioxide. Do not use straight streams of water

**SPECIFIC HAZARDS ARISING FROM THE MATERIAL**
Material is combustible.

**HAZARDS FROM COMBUSTION PRODUCTS**
Carbon monoxide, carbon dioxide, other pyrolysis products typical of burning organic material.

**FIRE-FIGHTING PRECAUTIONS**
Evacuate area. Prevent runoff from fire control or dilution from entering drains, streams, sewers, drinking water supply, or other waterways. Use water spray to cool fire exposed surfaces and to protect personnel.

**SPECIAL PROTECTIVE EQUIPMENT**
Full protective clothing and self-contained breathing apparatus

**HAZCHEM CODE:** N/R

**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

**EMERGENCY PROCEDURES**
Prevent material from escaping to drains and waterways. Contain leaking packaging in a containment vessel. Prevent vapours from building up in confined areas. Ensure that drain valves are closed at all times. Clean up and report spills immediately.

**PERSONAL PRECAUTIONS**
Avoid contact with spilled material. Wear protective equipment including respiratory protection.
Work gloves that are resistant to aromatic hydrocarbons are recommended. Note: gloves made of polyvinyl acetate (PVA) are not water resistant and are not suitable for emergency use. For small spills: normal antistatic work clothes are usually adequate. For large spills: full body suit of chemical resistant, antistatic material is recommended.

**ENVIRONMENTAL PRECAUTIONS**
Prevent spillage from entering drains or water courses. Dyke far ahead of liquid spill.

**METHODS AND MATERIALS FOR CONTAINMENT**
Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Prevent entry into waterways, sewer, basements or confined areas. A vapour-suppressing foam may be used to reduce vapour. Use clean non-sparking tools to collect absorbed material. Large Spills: Water spray may reduce vapour, but may not prevent ignition in enclosed spaces. Recover by pumping or with suitable absorbent.

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

| | |
|---|---|
| **MINOR SPILLS** | ❖ Clean up all spills immediately<br>❖ Avoid contact with skin and eyes<br>❖ Use an appropriate respiratory device and maintain ventilation<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 LAND SPILLS** | ❖ Eliminate sources of ignition<br>❖ Warn occupants of downwind areas of possible fire/explosion or toxicity hazard<br>❖ Prevent product from entering sewers, watercourses, or low-lying areas<br>❖ Keep the public away from the area<br>❖ Shut off the source of the spill if possible and safe to do so<br>❖ Advise Fire and Emergency if substance has entered a watercourse or sewer or has contaminated soil or vegetation<br>❖ Take measures to minimise the effect on ground water<br>❖ Contain any spilled liquid with sand or earth<br>❖ Recover liquid spills by pumping – use explosion proof pump or hand pump – or with a suitable absorbent material |

| | |
|---|---|
| | ❖ Recover solid spills by mechanical collection methods; cover and prevent dusts or particles from spreading – consider wetting the product down, without diluting it – and vacuum or sweep up<br>❖ Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations<br>❖ See "First Aid Measures" and "Stability and Reactivity" |
| **MAJOR WATER SPILLS** | ❖ Eliminate any sources of ignition<br>❖ Warn occupants and shipping in downwind areas of possible fire/explosion or toxicity hazard<br>❖ Notify the port or relevant authority and keep the public away from the area<br>❖ Shut off the source of the spill if possible and safe to do so<br>❖ Confine the spill if possible<br>❖ Remove the product from the surface by skimming or with suitable absorbent material<br>❖ Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations<br>❖ See "First Aid Measures" and "Stability and Reactivity". |

## 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)
- ❖ Avoid release into the environment
- ❖ Take care to prevent spills, as they are a slip hazard
- ❖ Wear protective equipment when a risk of contact exists
- ❖ Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or grounding procedures.
- ❖ Handle containers with care; open slowly in order to control possible pressure release.
- ❖ Handle in accordance with good industrial hygiene and safety practices
- ❖ Treat empty containers as hazardous due to the possibility of residue remaining
- ❖ Loading/Unloading temperature: Ambient
- ❖ Transport temperature: Ambient

**CONDITIONS FOR SAFE STORAGE:**

- ❖ Keep in properly labelled original containers
- ❖ Keep containers closed and handle with care
- ❖ Storage temperature: Ambient, but below 25°C.
- ❖ Storage parametres: Well-ventilated place out of direct sunlight and away from all potential ignition sources. Avoid locations where heavy vapours could accumulate.

**STORAGE COMPATIBILITY:**

**APPROPRIATE STORAGE MATERIALS:**

- Carbon steel
- Stainless steel
- Polyester
- Teflon
- Polyethylene
- polypropylene

**UNSUITABLE STORAGE MATERIALS:**

- Butyl rubber
- Natural rubber
- EPDM
- Polystyrene

**SEE ALSO –** SECTION 10: Stability and Reactivity for further information on incompatible materials

# SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

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

**COMPONENT INFORMATION:** Naphtha

**New Zealand:** *Workplace Exposure Standards and Biological Exposure Indices, Edition 12: November 2020*

| | |
|---|---|
| TWA: | Oil mist, mineral: 5 mg/m3 |
| STEL: | Oil mist, mineral: 10 mg/m$_3$ |
| Advisory information | None |

**International:**
TWA 1200 mg/m$^3$ (184 ppm) total hydrocarbon vapour (ExxonMobil 2009)

The time weighted average (TWA) exposure standard is the highest allowable average airborne concentration of a particular substance when calculated over an eight-hour working day.

The short-term exposure limit (STEL) exposure standard is the maximum allowable exposure concentration for a substance during any 15-minute period in the working day.

Products may be identified as respiratory or skin sensitisers, or easily absorbed to the skin according to the below notations.

**Skin/Sk:** Substance is considered to have potential for significant skin absorption, risking overexposure

**Sen:** Substance is identified as having potential to cause respiratory and/or dermal sensitisation – an allergic reaction or hypersensitivity affecting skin (dsen) or respiratory system (rsen). High exposure may hasten the onset of the allergy, but once developed in an individual, very low exposures can provoke a significant reaction.

**BIOLOGICAL LIMIT VALUES**
None established

**ENGINEERING CONTROLS**
Adequate ventilation should be provided so that exposure limits are not exceeded. Use explosion-proof ventilation equipment.

**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: Nitrile recommended
- Respiratory protection: If engineering controls do not maintain airborne contaminant concentrations at a level adequate to protect worker health, it is recommended to wear a half-face filter respirator with a Type A (organic vapour) filter. Refer to AS/NZS 1715: *Selection, use and maintenance of respiratory equipment*; and AS/NZS 1716: *Respiratory Protective Devices* for further details on the use of respiratory protective equipment.
- Chemical / oil resistant protective clothing is recommended 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** | Clear | **DENSITY (WATER=1)** | 0.79 |
| **PHYSICAL STATE** | Liquid | **PARTITION COEFFICIENT N-OCTANOL / WATER** | Log $P_{ow}$ >4 |
| **ODOUR** | Slight | **AUTO-IGNITION TEMPERATURE (°C)** | 233°C |
| **ODOUR THRESHOLD** | No data | **DECOMPOSITION TEMPERATURE (°C)** | No data |
| **pH (as supplied)** | N/A | **VISCOSITY (cSt) @20°C** | 1.8 |
| **MELTING POINT / FREEZING POINT** | No data | **MOLECULAR WEIGHT (g/mol)** | 161 |
| **BOILING POINT & BOILING RANGE** | 186 – 213°C | **TASTE** | N/A |
| **FLASH POINT** | 65°C | **EXPLOSIVE PROPERTIES** | No data |
| **EVAPORATION RATE** | No data | **OXIDISING PROPERTIES** | No data |
| **FLAMMABILITY** | Combustible | **SURFACE TENSION (mN/m)** | No data |
| **UPPER EXPLOSIVE LIMIT** | 6% | **VOLATILE COMPONENT (%vol)** | No data |
| **LOWER EXPLOSIVE LIMIT** | 0.6% | **GAS GROUP** | N/A |
| **VAPOUR PRESSURE (kPa) @ 20°C** | 0.05 | **pH AS A SOLUTION (1%)** | 7-9 |
| **SOLUBILITY IN WATER** | Negligible | **VOC g/L** | No data |
| **VAPOUR DENSITY @101kPa (Air = 1)** | 5.6 | **POUR POINT** | -57°C |

## SECTION 10: STABILITY AND REACTIVITY

**CHEMICAL STABILITY:** Product is considered stable at room temperature and pressure.
Hazardous polymerisation will not occur

**POSSIBILITY OF HAZARDOUS REACTIONS:** None known

**CONDITIONS TO AVOID:** Avoid heat, sparks and other ignition sources.
Heat may also 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:** Material does not decompose at ambient temperatures.

## SECTION 11: TOXICOLOGICAL INFORMATION

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

**EXPOSURE ROUTES:**

| | |
|---|---|
| Eye contact | Acute effect |
| Skin contact | Acute effect |
| Inhalation | Acute effect |
| Ingestion | Acute effect |

**ACUTE ORAL TOXICITY:** Minimally toxic following ingestion. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema. LD50 not determined.

**INFORMATION FOR COMPONENTS**:
**Naphtha**
**Acute Toxicity - Oral**: Not classified as acutely toxic by ingestion
$LD_{50}$: >5000 mg/kg

**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
**Naphtha**
Not classified as acutely toxic by skin contact
$LD_{50}$: >5000 mg/kg (rabbit)

**ACUTE INHALATION TOXICITY:** Minimally toxic following inhalation. Negligible irritation hazard at ambient/normal handling temperatures. 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.

**Naphtha**

Not classified as acutely toxic by inhalation

$LC_{50}$: >5000 mg/$m_3$/4 h (vapour, rat)

**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):**

This product has been classified as a Category 3 hazard. It may produce transient (short duration or temporary) target organ effects such as narcotic effects or respiratory tract irritation.

**ASPIRATION HAZARD:** May be fatal if swallowed and enters airways. A Category 1 hazard.

**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:** This product has been classified as a Category 2 hazard. Whilst evidence is limited, this substance may have adverse effects on sexual function and/or fertility.

**MUTAGENICITY:** This product has been classified as Category 1. Mutagenicity refers to the induction of permanent transmissible changes in the amount or structure of the genetic material (i.e, gene, DNA) of cells or organisms. A germ cell mutagen is a chemical that may cause mutations in the germ cells of humans that can be transmitted to the progeny.

Genotoxicity is a broader term and refers to processes which alter the structure, information content or segregation of DNA and are not necessarily associated with mutagenicity. All mutagens are genotoxic. Not all genotoxic substances are mutagenic.

Mutations can either occur in germ cells or somatic cells. Under GHS, only germ cell mutagens are classified. However, both test results from in vitro/in vivo germ cell and somatic cell mutagenicity tests should be considered.

- Germ cells are those cells that are involved in the reproductive process and can give rise to a new organism. Male germ cells give rise to sperm and female germ cells develop into ova. Toxicity to germ cells can cause effects on the developing fetus (such as birth defects, abortions).
- Somatic cells are all body cells except the reproductive germ cells. They have two sets (or pairs) of chromosomes. Toxicity to somatic cells causes a variety of toxic effects to the exposed individual (such as dermatitis, death, and cancer).
- In vitro (latin: "in the glass") test is a study that is performed outside of a living organism (i.e, glass, petri dishes). The test usually involves the use of isolated tissues, organs or cells.
- In vivo(latin: "in the living") test is a study that is performed in living organisms (i.e, rat, rabbit).

Category 1 includes Chemicals known to induce or regarded as if they induce heritable mutations in human germ cells

- Positive result(s) from in vivo heritable germ cell mutagenicity tests in mammals; or
- Positive result(s) from in vivo somatic cell mutagenicity tests in mammals, in combination with some evidence that the substance has potential to cause mutations to germ cells. This supporting evidence may, for example, be derived from mutagenicity/genotoxic tests in germ cells in vivo, or by demonstrating the ability of the substance or its metabolite(s) to interact with the genetic material of germ cells; or
- Positive results from tests showing mutagenic effects in the germ cells of humans, without demonstration of transmission to progeny; for example, an increase in the frequency of aneuploidy in sperm cells of exposed people.

# SECTION 12: ECOLOGICAL INFORMATION

**ECOTOXICITY:**

This product has been classified as hazardous to the aquatic environment chronic category 2, 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

***NAPHTHA***

**Ecotoxicity**
**Aquatic Toxicity**
Not classified

| | |
|---|---|
| Fish toxicity: | No data available |
| Crustacean toxicity): | No data available |
| Algae toxicity: | No data available |

**Terrestrial Ecotoxicity**
Not classified as hazardous to the terrestrial environment
**Persistence/degradability**
Expected to be readily biodegradable.
Transformation due to hydrolysis or photolysis not expected to be significant.
Expected to degrade rapidly in air.
**Bioaccumulative Potential**
No data available
**Mobility in Soil**
No information available
**Other adverse effects**
No additional adverse effects identified

**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:**

Disposal of hazardous waste must be carried out in compliance with all applicable regional and national regulations. This product is NOT suitable for disposal by domestic landfill or via municipal sewers, drains, natural streams or rivers. It must be disposed of as chemical waste in accordance with the local authority. Ensure that disposal of this product and its packaging is in accordance with the Hazardous Substances (Disposal) Notice 2017.
Refer to Section 8 of this SDS for precautions before carrying out disposal or recycling activities.

**PRODUCT DISPOSAL**
Dispose of product as chemical waste via a licenced service provider.
Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

**PACKAGING DISPOSAL**
Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. Care should be taken to ensure compliance with national and local authorities. Packaging may still

contain harmful residue and/or fumes and vapours that are combustible. Ensure that empty packaging is allowed to dry.

## 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.