# Dry-Treat Stain Proof Original

**Dry-Treat**

Chemwatch Hazard Alert Code: **3**

Chemwatch: **4903-61**
Version No: **10.1.1.1**
Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

Issue Date: **27/03/2015**
Print Date: **04/08/2016**
S.GHS.USA.EN

## SECTION 1 IDENTIFICATION

### Product Identifier

| | |
|---|---|
| **Product name** | Dry-Treat Stain Proof Original |
| **Synonyms** | masonry sealant, stain preventer |
| **Proper shipping name** | Flammable liquids, n.o.s. (contains ethanol) |
| **Other means of identification** | Not Available |

### Recommended use of the chemical and restrictions on use

| | |
|---|---|
| **Relevant identified uses** | Water and stain protection for masonry substrate. |

### Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

| | | | |
|---|---|---|---|
| **Registered company name** | **Dry-Treat** | **Dry-Treat** | **Dry-Treat Ltd** |
| **Address** | 150 Dascomb Road MA Andover 01810 United States | 4/149-155 Pascoe Vale Rd. VIC Moonee Ponds 3039 Australia | United Kingdom |
| **Telephone** | +1 866 667 5119 (USA) | 1800 675 119 (AUS) | 0800 0964 760 (UK) |
| **Fax** | +61 2 9954 3162 | +61 2 9954 3162 | +61 2 9954 3162 |
| **Website** | Not Available | Not Available | Not Available |
| **Email** | Not Available | Not Available | sds@drytreat.com |

### Emergency phone number

| | | | |
|---|---|---|---|
| **Association / Organisation** | **Not Available** | **Not Available** | **Not Available** |
| **Emergency telephone numbers** | (800) 255 3924 | +1 813 248 0585 (Outside USA) | +1 813 248 0585 (Outside USA) |
| **Other emergency telephone numbers** | +1 813 248 0585 (Outside USA) | Not Available | Not Available |

## SECTION 2 HAZARD(S) IDENTIFICATION

### Classification of the substance or mixture

**Considered a Hazardous Substance by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). Classified as Dangerous Goods for transport purposes.**

**CHEMWATCH HAZARD RATINGS**

| | | Min | Max |
|---|---|---|---|
| Flammability | 3 | | |
| Toxicity | 2 | | |
| Body Contact | 2 | | |
| Reactivity | 1 | | |
| Chronic | 0 | | |

0 = Minimum
1 = Low
2 = Moderate
3 = High
4 = Extreme

**NFPA 704 diamond**


Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

| | |
|---|---|
| **Classification** | Flammable Liquid Category 2, Acute Toxicity (Inhalation) Category 4, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Acute Aquatic Hazard Category 3, Chronic Aquatic Hazard Category 3 |

### Label elements

| | |
|---|---|
| **GHS label elements** |  |

Continued...

| SIGNAL WORD | DANGER |
|---|---|

### Hazard statement(s)

| | |
|---|---|
| **H225** | Highly flammable liquid and vapour. |
| **H332** | Harmful if inhaled. |
| **H315** | Causes skin irritation. |
| **H319** | Causes serious eye irritation. |
| **H412** | Harmful to aquatic life with long lasting effects. |

### Hazard(s) not otherwise specified

Not Applicable

### Precautionary statement(s) Prevention

| | |
|---|---|
| **P210** | Keep away from heat/sparks/open flames/hot surfaces. - No smoking. |
| **P233** | Keep container tightly closed. |
| **P271** | Use only outdoors or in a well-ventilated area. |
| **P240** | Ground/bond container and receiving equipment. |

### Precautionary statement(s) Response

| | |
|---|---|
| **P362** | Take off contaminated clothing and wash before reuse. |
| **P370+P378** | In case of fire: Use alcohol resistant foam or normal protein foam for extinction. |
| **P305+P351+P338** | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| **P312** | Call a POISON CENTER or doctor/physician if you feel unwell. |

### Precautionary statement(s) Storage

| | |
|---|---|
| **P403+P235** | Store in a well-ventilated place. Keep cool. |

### Precautionary statement(s) Disposal

| | |
|---|---|
| **P501** | Dispose of contents/container in accordance with local regulations. |

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

### Substances

See section below for composition of Mixtures

### Mixtures

| CAS No | %[weight] | Name |
|---|---|---|
| 64-17-5 | 30-60 | ethanol |
| Not Available | <60 | alkylalkoxysilane |
| 123-86-4 | <10 | n-butyl acetate |
| | balance | Ingredients determined not to be hazardous |

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

## SECTION 4 FIRST-AID MEASURES

### Description of first aid measures

| | |
|---|---|
| **Eye Contact** | If this product comes in contact with the eyes:<br>▸ Wash out immediately with fresh running water.<br>▸ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.<br>▸ Seek medical attention without delay; if pain persists or recurs seek medical attention.<br>▸ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. |
| **Skin Contact** | If skin contact occurs:<br>▸ Immediately remove all contaminated clothing, including footwear.<br>▸ Flush skin and hair with running water (and soap if available).<br>▸ Seek medical attention in event of irritation. |
| **Inhalation** | ▸ If fumes or combustion products are inhaled remove from contaminated area.<br>▸ Lay patient down. Keep warm and rested.<br>▸ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.<br>▸ Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.<br>▸ Transport to hospital, or doctor. |
| **Ingestion** | ▸ If swallowed do **NOT** induce vomiting.<br>▸ If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.<br>▸ Observe the patient carefully.<br>▸ Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.<br>▸ Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.<br>▸ Seek medical advice. |

**Continued...**

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

See Section 11

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

Treat symptomatically.
For acute or short term repeated exposures to ethanol:

- Acute ingestion in non-tolerant patients usually responds to supportive care with special attention to prevention of aspiration, replacement of fluid and correction of nutritional deficiencies (magnesium, thiamine pyridoxine, Vitamins C and K).
- Give 50% dextrose (50-100 ml) IV to obtunded patients following blood draw for glucose determination.
- Comatose patients should be treated with initial attention to airway, breathing, circulation and drugs of immediate importance (glucose, thiamine).
- Decontamination is probably unnecessary more than 1 hour after a single observed ingestion. Cathartics and charcoal may be given but are probably not effective in single ingestions.
- Fructose administration is contra-indicated due to side effects.

## SECTION 5 FIRE-FIGHTING MEASURES

### Extinguishing media

- Alcohol stable foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

### Special hazards arising from the substrate or mixture

| | |
|---|---|
| **Fire Incompatibility** | ▸ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result |

### Special protective equipment and precautions for fire-fighters

| | |
|---|---|
| **Fire Fighting** | ▸ Alert Fire Brigade and tell them location and nature of hazard.<br>▸ May be violently or explosively reactive.<br>▸ Wear breathing apparatus plus protective gloves in the event of a fire.<br>▸ Prevent, by any means available, spillage from entering drains or water course. |
| **Fire/Explosion Hazard** | ▸ Liquid and vapour are highly flammable.<br>▸ Severe fire hazard when exposed to heat, flame and/or oxidisers.<br>▸ Vapour may travel a considerable distance to source of ignition.<br>▸ Heating may cause expansion or decomposition leading to violent rupture of containers.<br>Combustion products include; carbon dioxide ($CO_2$) hydrogen fluoride, silicon dioxide ($SiO_2$) other pyrolysis products typical of burning organic material |

## SECTION 6 ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

See section 8

### Environmental precautions

See section 12

### Methods and material for containment and cleaning up

| | |
|---|---|
| **Minor Spills** | ▸ Remove all ignition sources.<br>▸ Clean up all spills immediately.<br>▸ Avoid breathing vapours and contact with skin and eyes.<br>▸ Control personal contact with the substance, by using protective equipment. |
| **Major Spills** | ▸ Clear area of personnel and move upwind.<br>▸ Alert Fire Brigade and tell them location and nature of hazard.<br>▸ May be violently or explosively reactive.<br>▸ Wear breathing apparatus plus protective gloves. |

Personal Protective Equipment advice is contained in Section 8 of the SDS.

## SECTION 7 HANDLING AND STORAGE

### Precautions for safe handling

| | |
|---|---|
| **Safe handling** | ▸ Containers, even those that have been emptied, may contain explosive vapours.<br>▸ Do NOT cut, drill, grind, weld or perform similar operations on or near containers.<br>▸ **DO NOT** allow clothing wet with material to stay in contact with skin<br>▸ Avoid all personal contact, including inhalation.<br>▸ Wear protective clothing when risk of exposure occurs.<br>▸ Use in a well-ventilated area.<br>▸ Prevent concentration in hollows and sumps. |
| **Other information** | ▸ Store in original containers in approved flame-proof area.<br>▸ No smoking, naked lights, heat or ignition sources.<br>▸ **DO NOT** store in pits, depressions, basements or areas where vapours may be trapped.<br>▸ Keep containers securely sealed. |

### Conditions for safe storage, including any incompatibilities

| | |
|---|---|
| **Suitable container** | ▸ Packing as supplied by manufacturer.<br>▸ Plastic containers may only be used if approved for flammable liquid.<br>▸ Check that containers are clearly labelled and free from leaks.<br>▸ For low viscosity materials (i) : Drums and jerry cans must be of the non-removable head type. (ii) : Where a can is to be used as an inner package, the can |

**Continued...**

| | |
|---|---|
| | ▸ must have a screwed enclosure.<br>▸ For materials with a viscosity of at least 2680 cSt. (23 deg. C)<br>▸ For manufactured product having a viscosity of at least 250 cSt. |
| **Storage incompatibility** | ▸ Avoid oxidising agents, acids, acid chlorides, acid anhydrides, chloroformates.<br>▸ Segregate from alcohol, water.<br>▸ Avoid strong acids, bases.<br>* |

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control parameters

**OCCUPATIONAL EXPOSURE LIMITS (OEL)**

**INGREDIENT DATA**

| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
|---|---|---|---|---|---|---|
| US OSHA Permissible Exposure Levels (PELs) - Table Z1 | ethanol | Ethyl alcohol (Ethanol) | 1900 mg/m3 / 1000 ppm | Not Available | Not Available | Not Available |
| US ACGIH Threshold Limit Values (TLV) | ethanol | Ethanol | Not Available | 1000 ppm | Not Available | TLV® Basis: URT irr |
| US NIOSH Recommended Exposure Limits (RELs) | ethanol | Alcohol, Cologne spirit, Ethanol, EtOH, Grain alcohol | 1900 mg/m3 / 1000 ppm | Not Available | Not Available | Not Available |
| US OSHA Permissible Exposure Levels (PELs) - Table Z1 | n-butyl acetate | n-Butyl-acetate | 710 mg/m3 / 150 ppm | Not Available | Not Available | Not Available |
| US ACGIH Threshold Limit Values (TLV) | n-butyl acetate | ‡ n-Butyl acetate | 150 ppm | 200 ppm | Not Available | TLV® Basis: Eye & URT irr |
| US NIOSH Recommended Exposure Limits (RELs) | n-butyl acetate | Butyl acetate, n-Butyl ester of acetic acid, Butyl ethanoate | 710 mg/m3 / 150 ppm | 950 mg/m3 / 200 ppm | Not Available | Not Available |

**EMERGENCY LIMITS**

| Ingredient | Material name | TEEL-1 | TEEL-2 | TEEL-3 |
|---|---|---|---|---|
| ethanol | Ethyl alcohol; (Ethanol) | Not Available | Not Available | Not Available |
| n-butyl acetate | Butyl acetate, n- | Not Available | Not Available | Not Available |

| Ingredient | Original IDLH | Revised IDLH |
|---|---|---|
| ethanol | 15,000 ppm | 3,300 [LEL] ppm |
| alkylalkoxysilane | Not Available | Not Available |
| n-butyl acetate | 10,000 ppm | 1,700 [LEL] ppm |

### Exposure controls

| | |
|---|---|
| **Appropriate engineering controls** | Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.<br>The basic types of engineering controls are:<br>Process controls which involve changing the way a job activity or process is done to reduce the risk.<br>Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. |
| **Personal protection** |  |
| **Eye and face protection** | ▸ Safety glasses with side shields.<br>▸ Chemical goggles.<br>▸ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. |
| **Skin protection** | See Hand protection below |
| **Hands/feet protection** | ▸ Wear chemical protective gloves, e.g. PVC.<br>▸ Wear safety footwear or safety gumboots, e.g. Rubber<br>The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.<br>The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and.has to be observed when making a final choice.<br>Suitability and durability of glove type is dependent on usage. |
| **Body protection** | See Other protection below |
| **Other protection**<br>.<br>. | ▸ Overalls.<br>▸ PVC Apron.<br>▸ PVC protective suit may be required if exposure severe.<br>▸ Eyewash unit.<br>Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.<br>For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets).<br>Non sparking safety or conductive footwear should be considered. Conductive footwear describes a boot or shoe with a sole made from a conductive compound chemically bound to the bottom components, for permanent control to electrically ground the foot an shall dissipate static electricity from the body to reduce the |

**Continued...**

| | |
|---|---|
| | possibility of ignition of volatile compounds. |
| **Thermal hazards** | Not Available |

### Recommended material(s)

**GLOVE SELECTION INDEX**

Glove selection is based on a modified presentation of the:
**"Forsberg Clothing Performance Index".**
The effect(s) of the following substance(s) are taken into account in the ***computer-generated*** selection:
Dry-Treat Stain Proof Original

| Material | CPI |
|---|---|
| ##n-butyl | acetate |
| BUTYL | C |
| BUTYL/NEOPRENE | C |
| HYPALON | C |
| NATURAL RUBBER | C |
| NATURAL+NEOPRENE | C |
| NEOPRENE | C |
| NEOPRENE/NATURAL | C |
| NITRILE | C |
| NITRILE+PVC | C |
| PE | C |
| PE/EVAL/PE | C |
| PVA | C |
| PVC | C |
| TEFLON | C |
| VITON/BUTYL | C |

* CPI - Chemwatch Performance Index
A: Best Selection
B: Satisfactory; may degrade after 4 hours continuous immersion
C: Poor to Dangerous Choice for other than short term immersion
**NOTE**: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -
* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

### Respiratory protection

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.
Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

| Required Minimum Protection Factor | Half-Face Respirator | Full-Face Respirator | Powered Air Respirator |
|---|---|---|---|
| up to 5 x ES | A-AUS / Class 1 P2 | - | A-PAPR-AUS / Class 1 P2 |
| up to 25 x ES | Air-line* | A-2 P2 | A-PAPR-2 P2 |
| up to 50 x ES | - | A-3 P2 | - |
| 50+ x ES | - | Air-line** | - |

* - Continuous-flow; ** - Continuous-flow or positive pressure demand
^ - Full-face
A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

| | |
|---|---|
| **Appearance** | Clear yellow highly flammable liquid with an ester-like odour. Not miscible with water, partial decomposition by hydrolysis. |

| | | | |
|---|---|---|---|
| **Physical state** | Liquid | **Relative density (Water = 1)** | 0.81 |
| **Odour** | Not Available | **Partition coefficient n-octanol / water** | Not Available |
| **Odour threshold** | Not Available | **Auto-ignition temperature (°C)** | Not Available |
| **pH (as supplied)** | Not Applicable | **Decomposition temperature** | Not Available |
| **Melting point / freezing point (°C)** | Not Available | **Viscosity (cSt)** | Not Available |
| **Initial boiling point and boiling range (°C)** | Not Available | **Molecular weight (g/mol)** | Not Applicable |
| **Flash point (°C)** | 13 (CC) | **Taste** | Not Available |
| **Evaporation rate** | Not Available | **Explosive properties** | Not Available |
| **Flammability** | HIGHLY FLAMMABLE. | **Oxidising properties** | Not Available |
| **Upper Explosive Limit (%)** | Not Available | **Surface Tension (dyn/cm or mN/m)** | Not Available |
| **Lower Explosive Limit (%)** | Not Available | **Volatile Component (%vol)** | Not Available |
| **Vapour pressure (kPa)** | Not Available | **Gas group** | Not Available |
| **Solubility in water (g/L)** | Immiscible | **pH as a solution (1%)** | Not Applicable |
| **Vapour density (Air = 1)** | Not Available | **VOC g/L** | Not Available |

## SECTION 10 STABILITY AND REACTIVITY

| | |
|---|---|
| **Reactivity** | See section 7 |

**Continued...**

| | |
|---|---|
| **Chemical stability** | ▸ Unstable in the presence of incompatible materials.<br>▸ Product is considered stable.<br>▸ Hazardous polymerisation will not occur. |
| **Possibility of hazardous reactions** | See section 7 |
| **Conditions to avoid** | See section 7 |
| **Incompatible materials** | See section 7 |
| **Hazardous decomposition products** | See section 5 |

## SECTION 11 TOXICOLOGICAL INFORMATION

### Information on toxicological effects

| | |
|---|---|
| **Inhaled** | Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful.<br>Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.<br>There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.<br>Animal testing shows that the most common signs of inhalation overdose is inco-ordination and drowsiness.<br>Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination. |
| **Ingestion** | Accidental ingestion of the material may be damaging to the health of the individual.<br>Ingestion of ethanol (ethyl alcohol, "alcohol") may produce nausea, vomiting, bleeding from the digestive tract, abdominal pain, and diarrhoea. Effects on the body:<br><br>Blood concentration: <1.5 g/L — Effects: Mild: impaired vision, co-ordination and reaction time; emotional instability<br>Blood concentration: 1.5-3.0 g/L — Effects: Moderate: Slurred speech, confusion, inco-ordination, emotional instability, disturbances in perception and senses, possible blackouts, and impaired objective performance in standardized tests. Possible double vision, flushing, fast heart rate, sweating and incontinence. Slow breathing may occur rarely and fast breathing may develop in cases of metabolic acidosis, low blood sugar and low blood potassium. |
| **Skin Contact** | The material may cause moderate inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.<br>Open cuts, abraded or irritated skin should not be exposed to this material<br>Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. |
| **Eye** | Direct contact of the eye with ethanol (alcohol) may cause an immediate stinging and burning sensation, with reflex closure of the lid, and a temporary, tearing injury to the cornea together with redness of the conjunctiva. Discomfort may last 2 days but usually the injury heals without treatment.<br>There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain. |
| **Chronic** | Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.<br>Prolonged exposure to ethanol may cause damage to the liver and cause scarring. It may also worsen damage caused by other agents. |

| | TOXICITY | IRRITATION |
|---|---|---|
| **Dry-Treat Stain Proof Original** | Not Available | Not Available |
| **ethanol** | Dermal (rabbit) LD50: 17100 mg/kg[1] | Eye (rabbit): 500 mg SEVERE |
| | Inhalation (rat) LC50: 64000 ppm/4hr[2] | Eye (rabbit):100mg/24hr-moderate |
| | Oral (rat) LD50: >1187-2769 mg/kg[1] | Skin (rabbit):20 mg/24hr-moderate |
| | | Skin (rabbit):400 mg (open)-mild |
| **n-butyl acetate** | Dermal (rabbit) LD50: >14080 mg/kg[1] | * [PPG] |
| | Inhalation (rat) LC50: 2000 ppm/4hr[2] | Eye ( human): 300 mg |
| | Inhalation (rat) LC50: 390 ppm/4hr[2] | Eye (rabbit): 20 mg (open)-SEVERE |
| | Oral (rat) LD50: 10736 mg/kg[1] | Eye (rabbit): 20 mg/24h - moderate |
| | | Skin (rabbit): 500 mg/24h-moderate |

| | |
|---|---|
| ***Legend:*** | *1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances* |

**Continued...**

| | |
|---|---|
| **N-BUTYL ACETATE** | The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. |
| **ETHANOL & N-BUTYL ACETATE** | The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. |

| | | | |
|---|---|---|---|
| **Acute Toxicity** | ✔ | **Carcinogenicity** | ⊘ |
| **Skin Irritation/Corrosion** | ✔ | **Reproductivity** | ⊘ |
| **Serious Eye Damage/Irritation** | ✔ | **STOT - Single Exposure** | ⊘ |
| **Respiratory or Skin sensitisation** | ⊘ | **STOT - Repeated Exposure** | ⊘ |
| **Mutagenicity** | ⊘ | **Aspiration Hazard** | ⊘ |

***Legend:*** ✘ *– Data available but does not fill the criteria for classification*
✔ *– Data required to make classification available*
⊘ *– Data Not Available to make classification*

## SECTION 12 ECOLOGICAL INFORMATION

### Toxicity

| Ingredient | Endpoint | Test Duration (hr) | Species | Value | Source |
|---|---|---|---|---|---|
| **ethanol** | EC50 | 24 | Algae or other aquatic plants | 0.0129024mg/L | 4 |
| **ethanol** | EC50 | 48 | Crustacea | 2mg/L | 4 |
| **ethanol** | LC50 | 96 | Fish | 42mg/L | 4 |
| **ethanol** | NOEC | 2016 | Fish | 0.000375mg/L | 4 |
| **ethanol** | EC50 | 72 | Algae or other aquatic plants | 275mg/L | 2 |
| **n-butyl acetate** | EC50 | 48 | Crustacea | =32mg/L | 1 |
| **n-butyl acetate** | EC50 | 96 | Algae or other aquatic plants | 1.675mg/L | 3 |
| **n-butyl acetate** | EC50 | 96 | Fish | 18mg/L | 2 |
| **n-butyl acetate** | LC50 | 96 | Fish | 18mg/L | 2 |
| **n-butyl acetate** | NOEC | 504 | Crustacea | 23mg/L | 2 |
| ***Legend:*** | *Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data* | | | | |

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.
Wastes resulting from use of the product must be disposed of on site or at approved waste sites.
For Ethanol:
log Kow: -0.31 to -0.32;
Koc 1: Estimated BCF= 3;
Half-life (hr) air: 144;
Half-life (hr) H2O surface water: 144;
Henry's atm m3 /mol: 6.29E-06;
BOD 5 if unstated: 0.93-1.67,63%
COD: 1.99-2.11,97%;
ThOD : 2.1.
Environmental Fate: Terrestrial - Ethanol quickly biodegrades in soil but may leach into ground water; most is lost by evaporation. Ethanol is expected to have very high mobility in soil.
Volatilization of ethanol from moist soil surfaces is expected to be an important fate process.
**DO NOT** discharge into sewer or waterways.

### Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|---|---|---|
| ethanol | LOW (Half-life = 2.17 days) | LOW (Half-life = 5.08 days) |
| n-butyl acetate | LOW | LOW |

### Bioaccumulative potential

| Ingredient | Bioaccumulation |
|---|---|
| ethanol | LOW (LogKOW = -0.31) |
| n-butyl acetate | LOW (BCF = 14) |

### Mobility in soil

| Ingredient | Mobility |
|---|---|
| ethanol | HIGH (KOC = 1) |
| n-butyl acetate | LOW (KOC = 20.86) |

## SECTION 13 DISPOSAL CONSIDERATIONS

**Continued...**

### Waste treatment methods

| | |
|---|---|
| **Product / Packaging disposal** | Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.<br>A Hierarchy of Controls seems to be common - the user should investigate:<br>▸ Reduction<br>▸ Reuse<br>▸ Recycling<br>▸ Disposal (if all else fails)<br>This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.<br>▸ **DO NOT** allow wash water from cleaning or process equipment to enter drains.<br>▸ It may be necessary to collect all wash water for treatment before disposal.<br>▸ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.<br>▸ Where in doubt contact the responsible authority.<br>▸ Recycle wherever possible.<br>▸ Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.<br>▸ Dispose of by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or Incineration in a licenced apparatus (after admixture with suitable combustible material).<br>▸ Decontaminate empty containers. |

## SECTION 14 TRANSPORT INFORMATION

### Labels Required

| | |
|---|---|
| |  |
| **Marine Pollutant** | NO |

### Land transport (DOT)

| | |
|---|---|
| **UN number** | 1993 |
| **UN proper shipping name** | Flammable liquids, n.o.s. (contains ethanol) |
| **Transport hazard class(es)** | Class: 3<br>Subrisk: Not Applicable |
| **Packing group** | II |
| **Environmental hazard** | Not Applicable |
| **Special precautions for user** | Hazard Label: 3<br>Special provisions: IB2, T7, TP1, TP8, TP28 |

### Air transport (ICAO-IATA / DGR)

| | |
|---|---|
| **UN number** | 1993 |
| **UN proper shipping name** | Flammable liquid, n.o.s. * (contains ethanol) |
| **Transport hazard class(es)** | ICAO/IATA Class: 3<br>ICAO / IATA Subrisk: Not Applicable<br>ERG Code: 3H |
| **Packing group** | II |
| **Environmental hazard** | Not Applicable |
| **Special precautions for user** | Special provisions: A3<br>Cargo Only Packing Instructions: 364<br>Cargo Only Maximum Qty / Pack: 60 L<br>Passenger and Cargo Packing Instructions: 353<br>Passenger and Cargo Maximum Qty / Pack: 5 L<br>Passenger and Cargo Limited Quantity Packing Instructions: Y341<br>Passenger and Cargo Limited Maximum Qty / Pack: 1 L |

### Sea transport (IMDG-Code / GGVSee)

| | |
|---|---|
| **UN number** | 1993 |
| **UN proper shipping name** | FLAMMABLE LIQUID, N.O.S. (contains ethanol) |
| **Transport hazard class(es)** | IMDG Class: 3<br>IMDG Subrisk: Not Applicable |
| **Packing group** | II |
| **Environmental hazard** | Not Applicable |

**Continued...**

| | | |
|---|---|---|
| **Special precautions for user** | EMS Number | F-E, S-E |
| | Special provisions | 274 |
| | Limited Quantities | 1 L |

### Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

Limited Quantity Exemption for Land/Ground Transport: Per 49 CFR 173.150(b)(2): For flammable liquids in Packing Group II, inner packaging's not over 1.0 L (.3 gallons) net capacity each, packaged in a strong outer packaging, are excepted from labelling requirements, unless the material is offered for transportation or transported by aircraft.

## SECTION 15 REGULATORY INFORMATION

### Safety, health and environmental regulations / legislation specific for the substance or mixture

**ETHANOL(64-17-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

US - Alaska Limits for Air Contaminants
US - California Permissible Exposure Limits for Chemical Contaminants
US - Hawaii Air Contaminant Limits
US - Idaho - Limits for Air Contaminants
US - Michigan Exposure Limits for Air Contaminants
US - Minnesota Permissible Exposure Limits (PELs)
US - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL): Carcinogens
US - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL): Mutagens
US - Oregon Permissible Exposure Limits (Z-1)
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants
US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants
US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants
US - Washington Permissible exposure limits of air contaminants
US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
US ACGIH Threshold Limit Values (TLV)
US ACGIH Threshold Limit Values (TLV) - Carcinogens
US NIOSH Recommended Exposure Limits (RELs)
US OSHA Permissible Exposure Levels (PELs) - Table Z1
US Spacecraft Maximum Allowable Concentrations (SMACs) for Airborne Contaminants
US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

**N-BUTYL ACETATE(123-86-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

US - Alaska Limits for Air Contaminants
US - California Permissible Exposure Limits for Chemical Contaminants
US - Hawaii Air Contaminant Limits
US - Idaho - Limits for Air Contaminants
US - Michigan Exposure Limits for Air Contaminants
US - Minnesota Permissible Exposure Limits (PELs)
US - Oregon Permissible Exposure Limits (Z-1)
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants
US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants
US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants
US - Washington Permissible exposure limits of air contaminants
US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
US ACGIH Threshold Limit Values (TLV)
US NIOSH Recommended Exposure Limits (RELs)
US OSHA Permissible Exposure Levels (PELs) - Table Z1
US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

### Federal Regulations

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**SECTION 311/312 HAZARD CATEGORIES**

| | |
|---|---|
| Immediate (acute) health hazard | YES |
| Delayed (chronic) health hazard | NO |
| Fire hazard | YES |
| Pressure hazard | NO |
| Reactivity hazard | NO |

**US. EPA CERCLA HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES (40 CFR 302.4)**

| Name | Reportable Quantity in Pounds (lb) | Reportable Quantity in kg |
|---|---|---|
| Butyl acetate | 5000 | 2270 |

### State Regulations

**US. CALIFORNIA PROPOSITION 65**

None Reported

| National Inventory | Status |
|---|---|
| Australia - AICS | Y |
| Canada - DSL | Y |
| Canada - NDSL | N (n-butyl acetate; ethanol) |
| China - IECSC | Y |
| Europe - EINEC / ELINCS / NLP | Y |
| Japan - ENCS | Y |
| Korea - KECI | Y |
| New Zealand - NZIoC | Y |
| Philippines - PICCS | Y |
| USA - TSCA | Y |

**Continued...**

| | |
|---|---|
| ***Legend:*** | *Y = All ingredients are on the inventory*<br>*N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)* |

## SECTION 16 OTHER INFORMATION

### Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.
A list of reference resources used to assist the committee may be found at:
www.chemwatch.net

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

### Definitions and abbreviations

PC—TWA: Permissible Concentration-Time Weighted Average
PC—STEL: Permissible Concentration-Short Term Exposure Limit
IARC: International Agency for Research on Cancer
ACGIH: American Conference of Governmental Industrial Hygienists
STEL: Short Term Exposure Limit
TEEL: Temporary Emergency Exposure Limit。
IDLH: Immediately Dangerous to Life or Health Concentrations
OSF: Odour Safety Factor
NOAEL :No Observed Adverse Effect Level
LOAEL: Lowest Observed Adverse Effect Level
TLV: Threshold Limit Value
LOD: Limit Of Detection
OTV: Odour Threshold Value
BCF: BioConcentration Factors
BEI: Biological Exposure Index