

Dry-Treat Stain Proof Original

Dry-Treat

Chemwatch: **4903-61** Version No: **10.1.1.1**

Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

Chemwatch Hazard Alert Code: 3

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



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



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





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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

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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.

► Seek medical advice.

SECTION 4 FIRST-AID MEASURES

Description of first aid me	asures
Eye Contact	If this product comes in contact with the eyes: • Wash out immediately with fresh running water. • 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. • Seek medical attention without delay; if pain persists or recurs seek medical attention. • Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: ► Immediately remove all contaminated clothing, including footwear. ► Flush skin and hair with running water (and soap if available). ► Seek medical attention in event of irritation.
Inhalation	 If furnes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. 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. Transport to hospital, or doctor.
Ingestion	 If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.

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Most important symptoms and effects, both acute and delayed

See Section 11

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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.
- ▶ May be violently or explosively reactive.
- ▶ Wear breathing apparatus plus protective gloves in the event of a fire.
- ▶ Prevent, by any means available, spillage from entering drains or water course.
- Fire/Explosion Hazard
- ▶ Liquid and vapour are highly flammable.
- ► Severe fire hazard when exposed to heat, flame and/or oxidisers.
- ▶ Vapour may travel a considerable distance to source of ignition.
- ▶ Heating may cause expansion or decomposition leading to violent rupture of containers

Combustion products include; carbon dioxide (CO2) hydrogen fluoride, silicon dioxide (SiO2) 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

- ► Remove all ignition sources.
- Clean up all spills immediately.
- ▶ Avoid breathing vapours and contact with skin and eyes.
- ► Control personal contact with the substance, by using protective equipment.
- Major Spills
- ► Clear area of personnel and move upwind.
- ► Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- ▶ 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.
- ▶ Do NOT cut, drill, grind, weld or perform similar operations on or near containers.
- ▶ DO NOT allow clothing wet with material to stay in contact with skin
- ► Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
 Use in a well-ventilated area.
- ▶ Prevent concentration in hollows and sumps.

Other information

- Store in original containers in approved flame-proof area.
- No smoking, naked lights, heat or ignition sources.
- DO NOT store in pits, depressions, basements or areas where vapours may be trapped
- ► Keep containers securely sealed.

Conditions for safe storage, including any incompatibilities

Suitable container

- Packing as supplied by manufacturer.
- ▶ Plastic containers may only be used if approved for flammable liquid.
- Check that containers are clearly labelled and free from leaks.
- 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

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- must have a screwed enclosure.
- ► For materials with a viscosity of at least 2680 cSt. (23 deg. C)
- ► For manufactured product having a viscosity of at least 250 cSt.

Storage incompatibility

- ▶ Avoid oxidising agents, acids, acid chlorides, acid anhydrides, chloroformates.
- Segregate from alcohol, water.
- Avoid strong acids, bases.

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.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

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











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- ► Safety glasses with side shields
- Eye and face protection
- Chemical goggles.
- 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.
- ▶ Wear safety footwear or safety gumboots, e.g. Rubber

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.

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.

Suitability and durability of glove type is dependent on usage.

Body protection

See Other protection below

- ► Overalls.
- ▶ PVC Apron.
- ► PVC protective suit may be required if exposure severe.

Other protection. Eyewash unit. Some plastic pers

Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity. For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets).

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

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Thermal hazards

possibility of ignition of volatile compounds.

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 computergenerated selection:

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

^{*} 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

A(AII classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogencyanide(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

Clear yellow highly flammable liquid with an ester-like odour. Not miscible with water, partial decomposition by hydrolysis.		
Liquid	Relative density (Water = 1)	0.81
Not Available	Partition coefficient n-octanol / water	Not Available
Not Available	Auto-ignition temperature (°C)	Not Available
Not Applicable	Decomposition temperature	Not Available
Not Available	Viscosity (cSt)	Not Available
Not Available	Molecular weight (g/mol)	Not Applicable
13 (CC)	Taste	Not Available
Not Available	Explosive properties	Not Available
HIGHLY FLAMMABLE.	Oxidising properties	Not Available
Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Not Available	Volatile Component (%vol)	Not Available
Not Available	Gas group	Not Available
Immiscible	pH as a solution (1%)	Not Applicable
Not Available	VOC g/L	Not Available
	Liquid Not Available Not Available Not Applicable Not Available Not Available 13 (CC) Not Available HIGHLY FLAMMABLE. Not Available Not Available Indicate the second of the	Liquid Relative density (Water = 1) Not Available Partition coefficient n-octanol / water Not Available Auto-ignition temperature (°C) Not Applicable Decomposition temperature Not Available Viscosity (cSt) Not Available Molecular weight (g/mol) 13 (CC) Taste Not Available Explosive properties HIGHLY FLAMMABLE. Oxidising properties Not Available Surface Tension (dyn/cm or mN/m) Not Available Volatile Component (%vol) Not Available Gas group Immiscible Partition coefficient n-octanol (Water = 1) Relative density (Water = 1) Partition coefficient n-octanol / water Auto-ignition temperature (°C) Not Available Surjection (g/mol) Volatile Component (%vol)

SECTION 10 STABILITY AND REACTIVITY

Reactivity

See section 7

^{^ -} Full-face

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Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable. 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

Ingestion

Eye

Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful.
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. 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. Animal testing shows that the most common signs of inhalation overdose is inco-ordination and drowsiness.

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.

Accidental ingestion of the material may be damaging to the health of the individual.

Ingestion of ethanol (ethyl alcohol, "alcohol") may produce nausea, vomiting, bleeding from the digestive tract, abdominal pain, and diarrhoea. Effects on the body:

Blood concentration	Effects
<1.5 g/L	Mild: impaired vision, co-ordination and reaction time; emotional instability
1.5-3.0 g/L	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.

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. Skin Contact

Open cuts, abraded or irritated skin should not be exposed to this material

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.

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. 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.

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Chronic Prolonged exposure to ethanol may cause damage to the liver and cause scarring. It may also worsen damage caused by other agents.

Dry-Treat Stain Proof	TOXICITY	IRRITATION
Original	Not Available	Not Available
	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 17100 mg/kg ^[1]	Eye (rabbit): 500 mg SEVERE
ethanol	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
	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >14080 mg/kg ^[1]	*[PPG]
	Inhalation (rat) LC50: 2000 ppm/4hr ^[2]	Eye (human): 300 mg
n-butyl acetate	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

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

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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	0
Skin Irritation/Corrosion	✓	Reproductivity	0
Serious Eye Damage/Irritation	~	STOT - Single Exposure	0
Respiratory or Skin sensitisation	0	STOT - Repeated Exposure	0
Mutagenicity	0	Aspiration Hazard	0

Legend:

🗶 – Data available but does not fill the criteria for classification

✓ – Data required to make classification available

O - 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:	Aquatic Toxicity Dat	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			

 $\label{thm:lambda} \mbox{Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.}$

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

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Waste treatment methods

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.

A Hierarchy of Controls seems to be common - the user should investigate:

- ▶ Reduction
- ▶ Reuse
- ▶ Recycling
- ► Disposal (if all else fails)

Product / Packaging disposal

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.

▶ DO NOT allow wash water from cleaning or process equipment to enter drains.

- ▶ It may be necessary to collect all wash water for treatment before disposal.
- ▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- ▶ Where in doubt contact the responsible authority.
- ▶ Recycle wherever possible.
- 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.
- 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).
- 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 Subrisk Not Applicable	
Packing group	II	
Environmental hazard	Not Applicable	
Special precautions for user	Hazard Label 3 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 ICAO / IATA Subrisk Not Applicable ERG Code 3H	
Packing group	II	
Environmental hazard	Not Applicable	
Special precautions for user	Special provisions Cargo Only Packing Instructions Cargo Only Maximum Qty / Pack Passenger and Cargo Packing Instructions Passenger and Cargo Maximum Qty / Pack Passenger and Cargo Limited Quantity Packing Instructions Passenger and Cargo Limited Maximum Qty / Pack	A3 364 60 L 353 5 L Y341 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 IMDG Subrisk Not Applicable
Packing group	II .
Environmental hazard	Not Applicable

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Dry-Treat Stain Proof Original

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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

ETHANOL (64 17 5) IS FOUND ON THE FOUL OWING DECLIF ATORY LISTS

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 - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants
US - California Permissible Exposure Limits for Chemical Contaminants	US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air
US - Hawaii Air Contaminant Limits	Contaminants
US - Idaho - Limits for Air Contaminants	US - Washington Permissible exposure limits of air contaminants
US - Michigan Exposure Limits for Air Contaminants	US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
US - Minnesota Permissible Exposure Limits (PELs)	US ACGIH Threshold Limit Values (TLV)
US - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL):	US ACGIH Threshold Limit Values (TLV) - Carcinogens
Carcinogens	US NIOSH Recommended Exposure Limits (RELs)
US - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL): Mutagens	US OSHA Permissible Exposure Levels (PELs) - Table Z1
US - Oregon Permissible Exposure Limits (Z-1)	US Spacecraft Maximum Allowable Concentrations (SMACs) for Airborne Contaminants
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
1	
N-BUTYL ACETATE(123-86-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS	
US - Alaska Limits for Air Contaminants	US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants

N-BUTTL ACETATE(123-86-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS	
US - Alaska Limits for Air Contaminants	US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminant
US - California Permissible Exposure Limits for Chemical Contaminants	US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air
US - Hawaii Air Contaminant Limits	Contaminants
US - Idaho - Limits for Air Contaminants	US - Washington Permissible exposure limits of air contaminants
US - Michigan Exposure Limits for Air Contaminants	US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
US - Minnesota Permissible Exposure Limits (PELs)	US ACGIH Threshold Limit Values (TLV)
US - Oregon Permissible Exposure Limits (Z-1)	US NIOSH Recommended Exposure Limits (RELs)
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	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	Υ
Canada - DSL	Υ
Canada - NDSL	N (n-butyl acetate; ethanol)
China - IECSC	Υ
Europe - EINEC / ELINCS / NLP	Y
Japan - ENCS	Υ
Korea - KECI	Υ
New Zealand - NZIoC	Υ
Philippines - PICCS	Υ
USA - TSCA	Υ

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Y = All ingredients are on the inventory

N = Not determined or one or more incre

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