

DRY-TREAT 40SK



Version 2.1.1.1
Chemwatch Material Safety Data Sheet (Conforms to Reg. (EC) No 1907/2006, Reg. (EC) No 1272/2008 and their amendments)
CHEMWATCH SDS

Chemwatch22-9860
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SAFETY DATASHEET

SECTION 1: Identification of the substance / mixture and of the company / undertaking

1.1. Product Identifier

Product name: DRY-TREAT 40SK
Chemical product name: No data available
Synonyms: "Water and salt protection", "Sandstone protection"
Proper shipping name: FLAMMABLE LIQUID, N.O.S.(contains acetone)
Chemical formula: No data available
Other means of identification: No data available
Index number: No data available
ID number: No data available
CAS number: No data available
REACH registration number: No data available
EC number: Not Available

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Protection for masonry substrate.
Uses advised against: No data available

1.3. Details of the supplier of the safety data sheet

Registered company name:	Dry-Treat Inc.	Dry-Treat Pty Ltd	Dry-Treat Ltd
Address:	1104 Philadelphia Plke, Wilmington, DE, 19809, USA	65 Nicholson Street, St. Leonards, NSW, 2065, AUS	3 North Street, Oatby, Leicester, LE2 5AH, GBR
Telephone:	+1 866 667 5119	1800 675 119	0800 0964 760
Fax:	+61 2 9954 3162	+61 2 9954 3162	+61 2 9954 3162
Email:			
Website:			

1.4. Emergency telephone number

Association / Organisation:	Dry-Treat	Dry-Treat	Dry-Treat
Other emergency telephone numbers:	(800) 255 3924	Outside USA +1 (813) 248 0585	Outside USA +1 (813) 248 0585
Other emergency telephone numbers:	Outside USA +1 (813) 248 0585		

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

DSD classification: In case of mixtures, classification has been prepared by following DPD (Directive 1999/45/EC) or CLP (Regulation (EC) No 1272/2008) regulations
DSD classification (additional): No data available
DPD classification:

R11	● Highly flammable.
R20	● Harmful by inhalation.
R36/37/38	● Irritating to eyes, respiratory system and skin.
R52/53	● Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	● HARMFUL-May cause lung damage if swallowed.
R66	● Repeated exposure may cause skin dryness and cracking.
R67	● Vapours may cause drowsiness and dizziness.

CLP classification:

- Flammable Liquid Category 2
- Acute Toxicity (Inhalation) Category 4
- Aspiration Hazard Category 1
- Skin Corrosion/Irritation Category 2
- Eye Irritation Category 2A
- STOT - SE (Resp. Irr.) Category 3
- STOT - SE (Narcosis) Category 3
- Chronic Aquatic Hazard Category 3

CLP classification No data available

(additional):

No data available

2.2. Label elements

CLP label elements



Signal word: DANGER

Hazard statement(s):	H225	Highly flammable liquid and vapour.
	H332	Harmful if inhaled.
	H304	May be fatal if swallowed and enters airways.
	H315	Causes skin irritation.
	H319	Causes serious eye irritation.
	H335	May cause respiratory irritation.
	H336	May cause drowsiness or dizziness.
	H412	Harmful to aquatic life with long lasting effects.

Determined by Chemwatch using CLP criteria

Additional Statement(s): No data available

Supplementary statement(s):	Code	Phrase
	EUH066	Repeated exposure may cause skin dryness or cracking.

Precautionary statement(s):	Prevention	Phrase
	Code	
	P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
	P233	Keep container tightly closed.
	P240	Ground/bond container and receiving equipment.
	P241	Use explosion-proof electrical/ventilating/lighting/ ... /equipment
	P242	Use only non-sparking tools.
	P243	Take precautionary measures against static discharge.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P264	Wash ... thoroughly after handling.
	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	
	Code	Phrase
	P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P302+P352	IF ON SKIN: Wash with plenty of soap and water.
	P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	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 present and easy to do. Continue rinsing.
	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.
	P337+P313	If eye irritation persists: Get medical advice/attention.
	P362	Take off contaminated clothing and wash before re-use.
	Storage	
	Code	Phrase
	P403+P233	Store in a well-ventilated place. Keep container tightly closed.
	P403+P235	Store in a well-ventilated place. Keep cool.
	P405	Store locked up.
	Disposal	
	Code	Phrase
	P501	Dispose of contents/container to ...

DSD / DPD label elements



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Xn

Relevant risk statements are found in section 2.1

Indication(s) of danger:	CONSIDERED A DANGEROUS MIXTURE ACCORDING TO DIRECTIVE 1999/45/EC AND ITS AMENDMENTS.	
Safety advice:	S16	• Keep away from sources of ignition. No smoking.
	S23	• Do not breathe gas/fumes/vapour/spray.
	S24	• Avoid contact with skin.
	S25	• Avoid contact with eyes.
	S36	• Wear suitable protective clothing.
	S37	• Wear suitable gloves.
	S39	• Wear eye/face protection.
	S51	• Use only in well ventilated areas.
	S09	• Keep container in a well ventilated place.
	S29	• Do not empty into drains.
	S401	• To clean the floor and all objects contaminated by this material, use water and detergent.
	S07	• Keep container tightly closed.
	S13	• Keep away from food, drink and animal feeding stuffs.
	S26	• In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre.
	S46	• If swallowed, IMMEDIATELY contact Doctor or Poisons Information Centre. (show this container or label).
	S60	• This material and its container must be disposed of as hazardous waste.

2.3. Other hazards		
R21/22?	• Skin contact and/or ingestion may produce health damage*.	
R33?	• Cumulative effects may result following exposure*.	

PBT/vPvB criteria	No data available
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SECTION 3: Composition / information on ingredients

3.1. Substances

See 'Composition on ingredients' in section 3.2

3.2. Mixtures

1. CAS No 2. EC No 3. Index No 4. REACH No	%[weight]	Name	Classification according to Directive 1999/45/EC [DPD]		Classification according to (EC) No 1272/2008 [CLP]
1. 67-64-1 2. 200-662-2 3. 606-001-00-8 4. No data available	<60	acetone	F Xi	R11 R36 R66 R67	Fam. Liq. 2 Eye Irrit. 2 STOT SE 3 CLP classification according to Annex VI of CLP (Regulation (EC) No 1272/2008)
1. 2. No data available 3. No data available 4.	<60	alkylalkoxysilane			
1. 2. No data available 3. No data available 4.	<60	alkyl silicate			
1. 77-58-7 2. 201-039-8 3. No data available 4. No data available	<1	dibutyltin dilaurate	T N	R25 R48/25 R50/53 R36/38 R60(2) R61(2) R68(3) R20/21? R33?	<ul style="list-style-type: none"> • Acute Toxicity Category 1 • Acute Toxicity Category 3 • Chronic Aquatic Hazard Category 1 • Eye Irritation Category 2A • Germ Cell Mutagen Category 2 • Reproductive Toxicity Category 1B • Skin Corrosion/Irritation Category 2 • STOT - RE Category 1
1. 2. No data available 3. No data available 4.	balance	additives not contributing to the classification			

SECTION 4: First aid measures

4.1. Description of first aid measures

General:	No data available
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Ingestion:	<ul style="list-style-type: none"> • 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. • If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.
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Eye Contact:	<p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> • 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
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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 fumes 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.

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

Inhaled:

- Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful.
- Evidence shows, or practical experience predicts, that the material produces irritation of the respiratory system, in a substantial number of individuals, following inhalation.

In contrast to most organs, the lung is able to respond to a chemical insult by first removing or neutralising the irritant and then repairing the damage.

- Inhalation of vapours may cause drowsiness and dizziness.

This may be accompanied by narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo.

- Inhalation of ethyl silicate may cause nose irritation, unsteadiness, tremors, salivation, respiratory difficulty and unconsciousness.

High concentrations can cause severe systemic injury including narcosis, liver and kidney damage and anaemia but at these concentrations the vapour becomes intolerable.

- Inhalation hazard is increased at higher temperatures.

Systemic effects of acetone inhalation exposure include central nervous system depression, light-headedness, incoherent speech, ataxia, stupor, hypotension, tachycardia, metabolic acidosis, hyperglycaemia and ketosis.

Rarely, convulsions and tubular necrosis may be evident.

- Exposure to ketone vapours may produce nose, throat and mucous membrane irritation.

High concentrations of vapour may produce central nervous system depression characterised by headache, vertigo, loss of coordination, narcosis and cardiorespiratory failure.

Ingestion:

- Swallowing of the liquid may cause aspiration of vomit into the lungs with the risk of haemorrhaging, pulmonary oedema, progressing to chemical pneumonitis; serious consequences may result.

Signs and symptoms of chemical (aspiration) pneumonitis may include coughing, gasping, choking, burning of the mouth, difficult breathing, and bluish coloured skin (cyanosis).

- Accidental ingestion of the material may be damaging to the health of the individual.
- Ingestion of ethyl silicate may produce liver, kidney and lung damage.

A single dose of undiluted hydrolysed ethyl silicate (syn: tetraethyl orthosilicate, hydrolysed) (2000 mg/kg body weight) given to 10 animals produced no deaths, nor toxicological symptoms; no abnormalities were seen during the test period nor at necropsy.

Skin Contact:

- The material produces moderate skin irritation; evidence exists, or practical experience predicts, that the material either

- produces moderate inflammation of the skin in a substantial number of individuals following direct contact, and/or
- produces significant, but moderate, inflammation when applied to the healthy intact skin of animals (for up to four hours), such inflammation being present twenty-four hours or more after the end of the exposure period.

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- Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.
- Skin contact with the material may damage the health of the individual; systemic effects may result following absorption.
- Skin contact with liquid ethyl silicate may result in dryness, cracking, inflammation.

Doses of >7940 mg/kg hydrolysed ethyl silicate (syn: tetraethyl orthosilicate) produced no systemic effects in rabbits.

- Open cuts, abraded or irritated skin should not be exposed to this material.
- Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds 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:

- Evidence exists, or practical experience predicts, that the material may cause severe eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals.

Eye contact may cause significant inflammation with pain.

- When 0.

1 ml of the undiluted hydrolysed ethyl silicate (syn: tetraethyl orthosilicate, hydrolysed) was placed in the conjunctival sac for of the right eye of rabbits and rinsed after 24 hours, there was only slight irritation recorded within a seven day observation period.

- The vapour when concentrated has pronounced eye irritation effects and this gives some warning of high vapour concentrations.

If eye irritation occurs seek to reduce exposure with available control measures, or evacuate area.

- The liquid may produce eye discomfort and is capable of causing temporary impairment of vision and/or transient eye inflammation, ulceration.

Chronic:

Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems.

Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following.

Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems.

Workers exposed to 700 ppm acetone for 3 hours/day for 7-15 years showed inflammation of the respiratory tract, stomach and duodenum, attacks of giddiness and loss of strength. Exposure to acetone may enhance liver toxicity of chlorinated solvents.

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

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Treat symptomatically.

For acute or short term repeated exposures to acetone:

- Symptoms of acetone exposure approximate ethanol intoxication.
- About 20% is expired by the lungs and the rest is metabolised. Alveolar air half-life is about 4 hours following two hour inhalation at levels near the Exposure Standard; in overdose, saturable metabolism and limited clearance, prolong the elimination half-life to 25-30 hours.
- There are no known antidotes and treatment should involve the usual methods of decontamination followed by supportive care.

[Ellenhorn and Barceloux: Medical Toxicology]

Management:

Measurement of serum and urine acetone concentrations may be useful to monitor the severity of ingestion or inhalation.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. 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

5.3. Advice for firefighters

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)

silicon dioxide (SiO₂)

other pyrolysis products typical of burning organic material

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal Protective Equipment:

Breathing apparatus. Chemical splash suit.

Minor Spills:

- 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:

Chemical Class: ketones

For release onto land: recommended sorbents listed in order of priority.

SORBENT TYPE	RANK	APPLICATION	COLLECTION	LIMITATIONS
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- 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.

6.2. Environmental precautions

Not applicable

6.3. Methods and material for containment and cleaning up

Not applicable

6.4. Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the MSDS

SECTION 7: Handling and storage

7.1. 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.

Fire and explosion protection

See section 5

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.

Not applicable

7.2. Conditions for safe storage, including any incompatibilities

Suitable container:

- Glass container is suitable for laboratory quantities
- 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 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. (23 deg. C)
- Manufactured product that requires stirring before use and having a viscosity of at least 20 cSt (25 deg. C): (i) Removable head packaging; (ii) Cans with friction closures and (iii) low pressure tubes and cartridges may be used.

Storage incompatibility:

Ethyl silicate:

- reacts slowly with water forming ethanol
- reacts violently with strong oxidisers
- is incompatible with acids, nitrates
- attacks some plastics and rubber

Acetone:

- may react violently with chloroform, activated charcoal, aliphatic amines, bromine, bromine trifluoride, chlorotriazine, chromic(IV) acid, chromic(VI) acid, chromium trioxide, chromyl chloride, hexachloromelamine, iodine heptafluoride, iodoform, liquid oxygen, nitrosyl chloride, nitrosyl perchlorate, nitril perchlorate, perchloromelamine, peroxomonosulfuric acid, platinum potassium tert-butoxide, strong acids, sulfur dichloride, trichloromelamine, xenon tetrafluoride
- reacts violently with bromoform and chloroform in the presence of alkalis or in contact with alkaline surfaces.
- may form unstable and explosive peroxides in contact with strong oxidisers, fluorine, hydrogen peroxide (90%), sodium perchlorate, 2-methyl-1,3-butadiene
- can increase the explosive sensitivity of nitromethane on contact flow or agitation may generate electrostatic charges due to low conductivity

Ketones in this group:

- are reactive with many acids and bases liberating heat and flammable gases (e.g., H₂).
- react with reducing agents such as hydrides, alkali metals, and nitrides to produce flammable gas (H₂) and heat.
- are incompatible with isocyanates, aldehydes, cyanides, peroxides, and anhydrides.
- react violently with aldehydes, HNO₃ (nitric acid), HNO₃ + H₂O₂ (mixture of nitric acid and hydrogen peroxide), and HClO₄ (perchloric acid).
- Avoid strong acids, bases.
- Avoid reaction with oxidising agents

Package Material Incompatibilities:

No data available

7.3. Specific end use(s)

See section 1.2

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Derived No Effect Level (DNEL)

Exposure Pattern	Workers	General Population	Exposure Pattern	Workers	General Population
Long term - dermal, systemic effects	No data available	No data available	Short term - dermal, systemic effects	No data available	No data available
Long term - inhalation, systemic effects	No data available	No data available	Short term - inhalation, systemic effects	No data available	No data available
Long term - oral, systemic effects	No data available	No data available	Short term - oral, systemic effects	No data available	No data available
Long term - dermal, local effects	No data available	No data available	Short term - dermal, local effects	No data available	No data available
Long term - inhalation, local effects	No data available	No data available	Short term - inhalation, local effects	No data available	No data available

Occupational Exposure Limits (OEL)

Source	Material	TWA ppm	TWA mg/m ³	STEL ppm	STEL mg/m ³	Peak ppm	Peak mg/m ³	TWA F/CC	Notes
EJ Consolidated List of Indicative Occupational Exposure Limit Values (IOELVs)	acetone (Acetone)	500	1210						

European Union (EU) First List of Indicative Occupational Exposure Limit Values (IOELVs) (English)	acetone (Acetone)	500	1 210		
UK Workplace Exposure Limits (WELs)	acetone (Acetone)	500	1210	1500	3620
UK Workplace Exposure Limits (WELs)	dibutyltin dilaurate (Tin compounds, organic, except Cyhexatin (ISO), (as Sn))		0.1	0.2	Sk
Not applicable					
Not applicable					

8.2. Exposure controls

8.2.1. 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.

8.2.2. Personal protection



Eye and face protection:

- Safety glasses with side shields.
- 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 lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]

Skin protection: See Hand protection: below

Hand protection:

- Wear chemical protective gloves, e.g. PVC.
- Wear safety footwear or safety gumboots, e.g. Rubber

The selection of the 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. Important factors in the selection of gloves include:

Body protection: See Other protection: below

Other protection:

- Overalls.
- PVC Apron.
- PVC protective suit may be required if exposure severe.
- Eyewash unit.
- 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 footwear.

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

Thermal hazards: No data available

Recommended material(s): Not applicable

8.2.3. Environmental exposure controls

See section 12

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Highly flammable liquid with a characteristic odour; partially miscible with water.
Odour	No data available
Odour threshold	No data available
Taste	No data available
pH (1% solution)	Not Available
pH (as supplied)	Not Available
Melting point / freezing point (°C)	Not Available
Initial boiling point and boiling range (°C)	Not Available
Flash Point (°C)	-17 (ketone)
Evaporation rate	Not Available
Flammability	No data available

Vapour Pressure (kPa)	Not Available
Vapour density	Not Available
Relative Density (Water = 1)	0.84
Solubility in water (g/L)	Not Available
Partition coefficient: n-octanol / water	No data available
Auto-ignition temperature (°C)	Not Available
Critical Temperature	Not Available
Viscosity	Not Available
Explosive properties	No data available
Oxidising properties	No data available
Physical State	LIQUID
Upper Explosive Limit (%)	Not Available
Lower Explosive Limit (%)	Not Available
Surface Tension	No data available
Volatile Component (%vol)	Not Available
Gas group	No data available
Molecular weight (g/mol)	Not Applicable
Evaporation Rate	Not Available
IUCLID Remarks	No data available

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity	See section 7.2
10.2. Chemical stability	<ul style="list-style-type: none"> • Presence of incompatible materials. • Product is considered stable. • Hazardous polymerisation will not occur.
10.3. Possibility of hazardous reactions	See section 7.2
10.4. Conditions to avoid	See section 7.2
10.5. Incompatible materials	See section 7.2
10.6. Hazardous decomposition products	See section 5.3

SECTION 11: Toxicological information

11.1. Information on toxicological effects	
Mutagenicity:	No data available
Reproductive Toxicity:	No data available
Carcinogenicity:	No data available
STOT - single exposure:	No data available

unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances

Not available. Refer to individual constituents.

The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis.

for acetone:

The acute toxicity of acetone is low. Acetone is not a skin irritant or sensitiser but is a defatting agent to the skin.

SKIN

acetone GESAMP/EHS Composite List - GESAMP Hazard Profiles

D1: skin irritation/corrosion

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SECTION 12: Ecological information

12.1. Toxicity	
Fish:	No data available
Daphnia Magna:	No data available
Algae:	No data available
Toxic to aquatic micro-organisms:	No data available

DO NOT discharge into sewer or waterways.

For ketones:

Ketones, unless they are alpha, beta-unsaturated ketones, can be considered as narcosis or baseline toxicity compounds

Hydrolysis may also involve the addition of water to ketones to yield ketals under mild acid conditions. However, this addition of water is thermodynamically favorable only for low molecular weight ketones.

Another possible reaction of ketones in water involves the enolic hydrogen on the carbons bonded to the carbonyl function.

for acetone:

log Kow: -0.24

Half-life (hr) air: 312-1896

Half-life (hr) H₂O surface water: 20

Henry's atm m³ /mol: 3.67E-05

BOD 5: 0.31-1.76,46-55%

COD: 1.12-2.07

ThOD: 2.2

BCF: 0.69

Environmental fate:

Acetone preferentially locates in the air compartment when released to the environment. A substantial amount of acetone can also be found in water, which is consistent with the high water to air partition coefficient and its small, but detectable, presence in rain water, sea water, and lake water samples.

In air, acetone is lost by photolysis and reaction with photochemically produced hydroxyl radicals; the estimated half-life of these combined processes is about 22 days.

Very toxic 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.

Organotin compounds are characterized by a Sn⁴⁺ ion to which one to four organic ligands are attached. They are classified according to the type of organic ligand and the most common are butyltins, octyltins och phenyltins.

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12.2. Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
Dry-Treat 40SK	No Data Available	No Data Available
acetone	LOW	HIGH
dibutyltin dilaurate	HIGH	No Data Available

12.3. Bioaccumulative potential

Ingredient	Bioaccumulation
acetone	LOW
dibutyltin dilaurate	LOW

12.4. Mobility in soil

Ingredient	Mobility
acetone	HIGH(ESTIMATED)
dibutyltin dilaurate	LOW(ESTIMATED)

12.5. Results of PBT and vPvB assessment

	P	B	T
Relevant available data	No data available	No data available	No data available
PBT and vPvB Criteria fulfilled?	No data available	No data available	No data available

12.6. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. 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. A Hierarchy of Controls seems to be common - the user should investigate: <ul style="list-style-type: none">• Reduction• 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. Observe all label safeguards until containers are cleaned and destroyed.
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Waste treatment options: No data available

Sewage disposal options: No relevant data

Other disposal recommendations: No data available

SECTION 14: Transport information

Labels Required: FLAMMABLE LIQUID

Land transport (ADR/ RID/ GGVSE)



14.1. UN number	1993	14.4. Packing group	II
14.2. UN proper shipping name	Shipping name: FLAMMABLE LIQUID, N.O.S.(contains acetone)	14.5. Environmental hazard	No relevant data
14.3. Transport hazard class(es)	3	14.6. Special precautions for user	Hazard identification (Kemler) 33 Classification Code F1 Hazard Label 3 Special provisions 274 601 640C Add limited quantity 1 L

Air transport (ICAO/IATA / DGR)



14.1. UN number	1993	14.4. Packing group	II														
14.2. UN proper shipping name	Shipping name: FLAMMABLE LIQUID, N.O.S. (contains acetone)	14.5. Environmental hazard	No relevant data														
14.3. Transport hazard class(es)	ICAO/IATA Class: 3 ICAO/IATA Subrisk: None ERG Code: 3H	14.6. Special precautions for user	<table border="1"> <tr> <td>Special provisions</td> <td>A3</td> </tr> <tr> <td>Cargo Only Packing Instructions</td> <td>364</td> </tr> <tr> <td>Cargo Only Maximum Qty / Pack</td> <td>60 L</td> </tr> <tr> <td>Passenger and Cargo Packing Instructions</td> <td>353</td> </tr> <tr> <td>Passenger and Cargo Maximum Qty / Pack</td> <td>5 L</td> </tr> <tr> <td>Passenger and Cargo Limited Quantity Packing Instructions</td> <td>Y341</td> </tr> <tr> <td>Passenger and Cargo Maximum Qty / Pack</td> <td>1 L</td> </tr> </table>	Special provisions	A3	Cargo Only Packing Instructions	364	Cargo Only Maximum Qty / Pack	60 L	Passenger and Cargo Packing Instructions	353	Passenger and Cargo Maximum Qty / Pack	5 L	Passenger and Cargo Limited Quantity Packing Instructions	Y341	Passenger and Cargo Maximum Qty / Pack	1 L
Special provisions	A3																
Cargo Only Packing Instructions	364																
Cargo Only Maximum Qty / Pack	60 L																
Passenger and Cargo Packing Instructions	353																
Passenger and Cargo Maximum Qty / Pack	5 L																
Passenger and Cargo Limited Quantity Packing Instructions	Y341																
Passenger and Cargo Maximum Qty / Pack	1 L																

Sea transport (IMDG-Code / GGVSee)



14.1. UN number	1993	14.4. Packing group	II						
14.2. UN proper shipping name	Shipping name: FLAMMABLE LIQUID, N.O.S. (contains acetone)	14.5. Environmental hazard	No relevant data						
14.3. Transport hazard class(es)	3 IMDG Subrisk: None	14.6. Special precautions for user	<table border="1"> <tr> <td>EVS Number</td> <td>F-E-S-E</td> </tr> <tr> <td>Special provisions</td> <td>274</td> </tr> <tr> <td>Limited Quantities</td> <td>1 L</td> </tr> </table>	EVS Number	F-E-S-E	Special provisions	274	Limited Quantities	1 L
EVS Number	F-E-S-E								
Special provisions	274								
Limited Quantities	1 L								

Inland waterways transport (ADNR / River Rhine)



14.1. UN number	1993	14.4. Packing group	II								
14.2. UN proper shipping name	Shipping name: FLAMMABLE LIQUID, N.O.S. (contains acetone)	14.5. Environmental hazard	No relevant data								
14.3. Transport hazard class(es)	3 ADNR Label: 3	14.6. Special precautions for user	<table border="1"> <tr> <td>Classification code</td> <td>F1</td> </tr> <tr> <td>Limited quantity</td> <td>LQ3</td> </tr> <tr> <td>Equipment required</td> <td>No data available</td> </tr> <tr> <td>Fire cones number</td> <td>1</td> </tr> </table>	Classification code	F1	Limited quantity	LQ3	Equipment required	No data available	Fire cones number	1
Classification code	F1										
Limited quantity	LQ3										
Equipment required	No data available										
Fire cones number	1										

14.7. Transport in bulk according to Annex II of MARPOL 73 / 78 and the IBC code

No data available

SECTION 15: Regulatory information

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

Regulations for ingredients

acetone (CAS: 67-64-1) is found on the following regulatory lists;

"A Bizottság 2000/39/EK irányelve a munkájuk során vegyi anyagokkal kapcsolatos kockázatoknak kitett munkavállalók egészségének és biztonságának védelméről szóló 98/24/EK tanácsi irányelv végrehajtásával kapcsolatban a javasolt foglalkozási expozíciós határértékek első listájának létrehozásáról", "Austria Indirect Discharger Ordinance Ordinance - Annex B: Threshold limit value for daily charges of hazardous waste water constituents (German).", "Austria Occupational Exposure Limits - Maximum Workplace Concentrations (MAK) (German)", "Belgium Occupational Exposure Limits (French)", "Bulgaria Limit values for the chemical agents in the air at the working environment", "Bulgaria Occupational Exposure Limits (Bulgarian)", "Czech Republic Occupational Exposure Limits (PEL and NPK-P) (Czech)", "Czech Republic Proposed List of Chemicals for Pollutant Release Transfer Register (PRTR)", "Denmark Vejledende liste over organiske opløsningsmidler", "Denmark Emission of Volatile Organic Compounds from Wood and Wood-Based Materials - All Chemicals List", "Denmark Emission of Volatile Organic Compounds from Wood and Wood-Based Materials - Project Specific List", "Denmark Indicative List of Organic Solvents (English)", "Denmark Limit values for air pollutants (English)", "DIRECTIVA 2000/39/CE A COMSIE de stabilire a primei liste de valori-limita orientative ale expunerii profesionale in aplicarea Directivei 98/24/CE a Consiliului privind protectia sanata?ii ???i a securita?ii lucra?torilor impotriva riscurilor legate de prezen?a agen?ilor chimici la locul de munca", "Directiva 2000/39/CE da Comiss?o, de 8 de Junho de 2000, relativa ao estabelecimento de uma primeira lista de valores limite de exposi?o profissional indicativos para execu?o da Directiva 98/24/CE do Conselho relativa ? protec?o da seguran?a e da sa?de dos trabalhadores contra os riscos ligados ? exposi?o a agentes qu?micos no trabalho", "Directiva 2000/39/CE de la Comisi?n, de 8 de junio de 2000, por la que se establece una primera lista de valores limite de exposici?n profesional indicativos en aplicaci?n de la Directiva 98/24/CE del Consejo relativa a la protecci?n de la salud y la seguridad de los trabajadores contra los riesgos relacionados con los agentes qu?micos durante el trabajo", "Directive 2000/39/CE de la Commission du 8 juin 2000 relative ? l'?tablissement d'une premi?re liste de valeurs

This safety data sheet is in compliance with the following EU legislation and its adaptations – as far as applicable - : 67/548/EEC, 1999/45/EC, 98/24/EC, 92/85/EEC, 94/33/EC, 91/689/EEC, 1999/13/EC, Regulation (EU) No 453/2010, Regulation (EC) No 1907/2006, Regulation (EC) No 1272/2008, and their amendments as well as the following British legislation:

- The Control of Substances Hazardous to Health Regulations (COSHH) 2002

- COSHH Essentials

- The Management of Health and Safety at Work Regulations 1999

15.2. Chemical safety assessment

ANNEX 1

acetone

606-001-00-8

Annex VI

Flammable Liquid Category 2

Acute Toxicity (Inhalation) Category 4

Aspiration Hazard Category 1

Skin Corrosion/Irritation Category 2

Eye Irritation Category 2A

STOT - SE (Resp. Irr.) Category 3

STOT - SE (Narcosis) Category 3

Chronic Aquatic Hazard Category 3

RISK

Risk Codes	Risk Phrases
R11	Highly flammable.
R20	Harmful by inhalation.
R36/37/38	Irritating to eyes, respiratory system and skin.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	HARMFUL-May cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness and cracking.
R67	Vapours may cause drowsiness and dizziness.

SECTION 16: Other information

ANNEX 2: Indications of Danger

F	Highly Flammable
N	Dangerous for the environment
T	Toxic
Xi	Irritant

OTHER

• 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/references

• The (M)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.

• For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:

EN 16 Personal eye-protection

EN 340 Protective clothing

EN 374 Protective gloves against chemicals and micro-organisms

EN 13832 Footwear protecting against chemicals

EN 133 Respiratory protective devices

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www.Chemwatch.net

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