## Stain Proof 40SK Consolidator and Water Repellent (Dry-Treat 40SK)

ICP Group Australasia Pty Ltd.

Version No: 12.15<br>Issue Date: 06/15/2020<br>Safety Data Sheet according to WHS and ADG requirements

## SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

| Product Identifier |
| :--- |
| Product name Stain Proof 40SK Consolidator and Water Repellent (Dry-Treat 40SK) <br> Synonyms Not Available <br> Proper shipping name FLAMMABLE LIQUID, N.O.S. (contains acetone) <br> Other means of identification Not Available <br> Relevant identified uses of the substance or mixture and uses advised against  <br> Relevant identified uses Penetrating Sealer <br> Details of the supplier of the safety data sheet  <br> Registered company name ICP Group Australasia Pty Ltd. <br> Address 30-32 Assembly Dr. Tullamarine VIC 3043 Australia <br> Telephone 1800 786 617 <br> Fax Not Available |

Emergency telephone number
Association / Organisation
Emergency telephone
numbers

## Chemtel

1300-954-583

Other emergency telephone numbers

## Not Available

## SECTION 2 HAZARDS IDENTIFICATION

| Classification of the substance or mixture |  |
| :---: | :---: |
| Poisons Schedule | Not Applicable |
| Classification ${ }^{[1]}$ | Eye Irritation Category 2A, Specific target organ toxicity - single exposure Category 3 (narcotic effects), Flammable Liquid Category 2, Reproductive Toxicity Category 1B, Chronic Aquatic Hazard Category 3 |
| Legend: | 1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008-Annex VI |
| Label elements |  |
| Hazard pictogram(s) |  |
| SIGNAL WORD | DANGER |
| Hazard statement(s) |  |
| H319 | Causes serious eye irritation. |
| AUH066 | Repeated exposure may cause skin dryness and cracking. |
| H336 | May cause drowsiness or dizziness. |
| H225 | Highly flammable liquid and vapour. |
| H360FD | May damage fertility. May damage the unborn child. |
| H412 | Harmful to aquatic life with long lasting effects. |

## Precautionary statement(s) General

Keep out of reach of children.

## Precautionary statement(s) Prevention

|  | P202 |
| :--- | :--- | Do not handle until all safety precautions have been read and understood..

## Precautionary statement(s) Response

| P308 + P313 | IF exposed or concerned: Get medical advice/attention. |
| ---: | :--- |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P302 + P352 | IF ON SKIN: Wash with plenty of water |

## Precautionary statement(s) Storage

| $\mathbf{P 4 0 3 + P 2 3 5}$ | Store in a well-ventilated place. Keep cool. |
| ---: | :--- |
| $\mathbf{P 4 0 5}$ | Store locked up. |

## Precautionary statement(s) Disposal

P501 Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

## Substances

See section below for composition of Mixtures

## Mixtures

| CAS No | \%[weight] | Name |
| :--- | :--- | :--- |
| $67-64-1$ | $75-80$ | acetone |
| $77-58-7$ | $<1$ | dibutyltin dilaurate |
| $2943-75-1$ | $5-10$ | octylriethoxysilane |
| $78-10-4$ | $1-5$ | tetraethyl silicate |

## 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, aerosols or combustion products are inhaled remove from contaminated area. <br> - Other measures are usually unnecessary. |
| 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. <br> - Avoid giving milk or oils. <br> - Avoid giving alcohol. <br> - If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus. |

## 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. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.
As in all cases of suspected poisoning, follow the ABCDEs of emergency medicine (airway, breathing, circulation, disability, exposure), then the ABCDEs of toxicology (antidotes, basics, change absorption, change distribution, change elimination).
For poisons (where specific treatment regime is absent):

## BASIC TREATMENT

- Establish a patent airway with suction where necessary.

Watch for signs of respiratory insufficiency and assist ventilation as necessary.

- Administer oxygen by non-rebreather mask at 10 to $15 \mathrm{~L} / \mathrm{min}$.

Monitor and treat, where necessary, for pulmonary oedema.

- Monitor and treat, where necessary, for shock.
- Anticipate seizures

DO NOT use emetics. Where ingestion is suspected rinse mouth and give up to 200 ml water ( $5 \mathrm{ml} / \mathrm{kg}$ recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.

## ADVANCED TREATMENT

- Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.
- Positive-pressure ventilation using a bag-valve mask might be of use.
- Monitor and treat, where necessary, for arrhythmias.
* Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.
- Drug therapy should be considered for pulmonary oedema.
- Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.
- Treat seizures with diazepam.
- Proparacaine hydrochloride should be used to assist eye irrigation.

BRONSTEIN, A.C. and CURRANCE, P.L.
EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994
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.
Inhalation Management:
- Maintain a clear airway, give humidified oxygen and ventilate if necessary.
- If respiratory irritation occurs, assess respiratory function and, if necessary, perform chest X-rays to check for chemical pneumonitis.
- Consider the use of steroids to reduce the inflammatory response
- Treat pulmonary oedema with PEEP or CPAP ventilation.

Dermal Management:

- Remove any remaining contaminated clothing, place in double sealed, clear bags, label and store in secure area away from patients and staff.
- Irrigate with copious amounts of water.
- An emollient may be required.

Eye Management:

* Irrigate thoroughly with running water or saline for 15 minutes.
- Stain with fluorescein and refer to an ophthalmologist if there is any uptake of the stain.

Oral Management:

- No GASTRIC LAVAGE OR EMETIC
- Encourage oral fluids.

Systemic Management:

- Monitor blood glucose and arterial pH.
- Ventilate if respiratory depression occurs.
- If patient unconscious, monitor renal function.
- Symptomatic and supportive care.

The Chemical Incident Management Handbook:
Guy's and St. Thomas' Hospital Trust, 2000
BIOLOGICAL EXPOSURE INDEX
These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):
Determinant Sampling Time Index Comments
$\begin{array}{lll}\text { Acetone in urine } & \text { End of shift } 50 \mathrm{mg} / \mathrm{L}\end{array}$
NS: Non-specific determinant; also observed after exposure to other material

## SECTION 5 FIREFIGHTING MEASURES

## Extinguishing media

- Alcohol stable foam.
- Dry chemical powder


## 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


## Advice for firefighters

| Fire Fighting | - Alert Fire Brigade and tell them location and nature of hazard. <br> - May be violently or explosively reactive. |
| :---: | :---: |
| Fire/Explosion Hazard | - Liquid and vapour are highly flammable. <br> - Severe fire hazard when exposed to heat, flame and/or oxidisers. <br> Combustion products include: <br> carbon dioxide (CO2) <br> silicon dioxide (SiO2) <br> other pyrolysis products typical of burning organic material. |
| HAZCHEM | -3YE |

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. |
| :--- | :--- |
| Major Spills | \& Clear area of personnel and move upwind. <br> * Alert Fire Brigade and tell them location and nature of hazard. |

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> - Avoid all personal contact, including inhalation. <br> - Wear protective clothing when risk of exposure occurs. |
| :---: | :---: |
| Other information | - Store in original containers in approved flame-proof area. <br> - No smoking, naked lights, heat or ignition sources. |


| Suitable container | - Packing as supplied by manufacturer. <br> - Plastic containers may only be used if approved for flammable liquid. <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 must have a screwed enclosure. |
| :---: | :---: |
| Storage incompatibility | Acetone: <br> - 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, nitryl perchlorate, perchloromelamine, peroxomonosulfuric acid, platinum, potassium tert-butoxide, strong acids, sulfur dichloride, trichloromelamine, xenon tetrafluoride <br> - reacts violently with bromoform and chloroform in the presence of alkalies or in contact with alkaline surfaces. <br> - may form unstable and explosive peroxides in contact with strong oxidisers, fluorine, hydrogen peroxide ( $90 \%$ ), sodium perchlorate, 2-methyl-1,3-butadiene <br> - can increase the explosive sensitivity of nitromethane on contact flow or agitation may generate electrostatic charges due to low conductivity <br> - dissolves or attacks most rubber, resins, and plastics (polyethylenes, polyester, vinyl ester, PVC, Neoprene, Viton) Ketones in this group: <br> - are reactive with many acids and bases liberating heat and flammable gases (e.g., H2). <br> - react with reducing agents such as hydrides, alkali metals, and nitrides to produce flammable gas (H2) and heat. <br> - Avoid reaction with oxidising agents |

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

| Control parameters |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OCCUPATIONAL EXPOSURE LIMITS (OEL) |  |  |  |  |  |  |  |  |
| \| Ingredient data |  |  |  |  |  |  |  |  |
| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |  |  |
| Australia Exposure Standards | acetone | Acetone | $\begin{aligned} & 500 \mathrm{ppm} / \\ & 1185 \\ & \mathrm{mg} / \mathrm{m} 3 \end{aligned}$ | $\begin{aligned} & 2375 \mathrm{mg} / \mathrm{m} 3 \\ & / 1000 \mathrm{ppm} \end{aligned}$ | Not <br> Available | Not Available |  |  |
| Australia Exposure Standards | dibutyltin dilaurate | Tin, organic compounds (as Sn ) | $0.1 \mathrm{mg} / \mathrm{m} 3$ | $0.2 \mathrm{mg} / \mathrm{m} 3$ | Not <br> Available | (g) Some compounds in these groups are classified as carcinogenic or as sensitisers. Check individual classification details on the safety data sheet for information on classification. |  |  |
| Australia Exposure Standards | tetraethyl silicate | Ethyl silicate | $10 \mathrm{ppm} /$ <br> $85 \mathrm{mg} / \mathrm{m} 3$ | Not Available | Not <br> Available | Not Available |  |  |
| \| EMERGENCY LIMITS |  |  |  |  |  |  |  |  |
| Ingredient | Material name |  |  |  | TEEL-1 |  | TEEL-2 | TEEL-3 |
| acetone | Acetone |  |  |  | Not Available |  | Not Available | Not Available |
| dibutyltin dilaurate | Dibutyltin dilaurate; (Dibutylbis(lauroyloxy)stannane) |  |  |  | $1.1 \mathrm{mg} / \mathrm{m} 3$ |  | $8 \mathrm{mg} / \mathrm{m} 3$ | $48 \mathrm{mg} / \mathrm{m} 3$ |
| tetraethyl silicate | Tetraethyl orthosilicate; (Ethyl silicate; Tetraethoxysilane) |  |  |  | Not Available |  | Not Available | Not Available |
| Ingredient | Original IDLH |  |  |  | Revised IDLH |  |  |  |
| acetone | 2,500 ppm |  |  |  | Not Available |  |  |  |
| dibutyltin dilaurate | $25 \mathrm{mg} / \mathrm{m} 3$ |  |  |  | Not Available |  |  |  |


| octyltriethoxysilane | Not Available | Not Available |
| :--- | :--- | :--- |
| tetraethyl silicate | 700 ppm | Not Available |
| OCCUPATIONAL EXPOSURE BANDING |  |  |
| Ingredient | Occupational Exposure Band Rating | Occupational Exposure Band Limit |
| octyltriethoxysilane | E | $\leq 0.1 \mathrm{ppm}$ |
| Notes: | Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the <br> adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a <br> range of exposure concentrations that are expected to protect worker health. |  |

## 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. |
| :---: | :---: |
| Personal protection |  |
| Eye and face protection | - Safety glasses with side shields. <br> - Chemical goggles. |
| 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 |
| Body protection | See Other protection below |
| Other protection | - Overalls. <br> - PVC Apron. <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). |

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | Not Available |  |  |
| :---: | :---: | :---: | :---: |
| Physical state | Liquid | Relative density (Water = 1) | Not Available |
| Odour | Not Available | Partition coefficient n-octanol / water | Not Available |
| Odour threshold | Not Available | Auto-ignition temperature ( ${ }^{\circ} \mathrm{C}$ ) | Not Available |
| pH (as supplied) | Not Available | Decomposition temperature | Not Available |
| Melting point / freezing point | Not Available | Viscosity (cSt) | Not Available |
| Initial boiling point and boiling range ( ${ }^{\circ} \mathrm{C}$ ) | Not Available | Molecular weight ( $\mathrm{g} / \mathrm{mol}$ ) | Not Available |
| Flash point ( ${ }^{\circ} \mathrm{C}$ ) | -17.00 | 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 $\mathrm{mN} / \mathrm{m}$ ) | Not Available |
| Lower Explosive Limit (\%) | Not Available | Volatile Component (\%vol) | Not Available |
| Vapour pressure (kPa) | Not Available | Gas group | Not Available |
| Solubility in water | Partly miscible | pH as a solution (1\%) | Not Available |
| Vapour density ( (ir = 1) | Not Available | VOC g/L | Not Available |

## SECTION 10 STABILITY AND REACTIVITY

| Reactivity | See section 7 |
| :---: | :---: |
| Chemical stability | - Unstable in the presence of incompatible materials. <br> - Product is considered stable. |
| Possibility of hazardous reactions | See section 7 |
| Conditions to avoid | See section 7 |
| Incompatible materials | See section 7 |

Hazardous decomposition products

## SECTION 11 TOXICOLOGICAL INFORMATION



| DIBUTYLTIN DILAURATE | Laboratory (in vitro) and animal studies show, exposure to the material may result in a possible risk of irreversible effects, with the possibility of producing mutation. |  |
| :---: | :---: | :---: |
| OCTYLTRIETHOXYSILANE | No significant acute toxicological data identified in literature search. |  |
| TETRAETHYL SILICATE | Liver, kidney and lung damage may result from overexposure by inhalation or swallowing. million for 30 days can be lethal. <br> The material may produce severe irritation to the eye causing pronounced inflammation. produce conjunctivitis. <br> For silica amorphous: <br> Derived No Adverse Effects Level (NOAEL) in the range of $1000 \mathrm{mg} / \mathrm{kg} / \mathrm{d}$. <br> In humans, synthetic amorphous silica (SAS) is essentially non-toxic by mouth, skin or eye evidence of adverse health effects due to SAS. | imal testing showed that exposure to 400 parts per <br> eated or prolonged exposure to irritants may <br> and by inhalation. Epidemiology studies show little |
| Stain Proof 40SK Consolidator and Water Repellent (Dry-Treat 40SK) \& OCTYLTRIETHOXYSILANE | Low molecular weight alkoxysilane can cause irreversible lung damage when inhaled at low | se. It is not an obvious skin irritant. |
| Stain Proof 40SK Consolidator and Water Repellent (Dry-Treat 40SK) \& ACETONE | For acetone: <br> The acute toxicity of acetone is low. Acetone is not a skin irritant or sensitizer, but it remo | from the skin, and it also irritates the eye. |
| ACETONE \& TETRAETHYL SILICATE | The material may cause skin irritation after prolonged or repeated exposure and may prod vesicles, scaling and thickening of the skin. | on contact skin redness, swelling, the production of |
| OCTYLTRIETHOXYSILANE \& TETRAETHYL SILICATE | Asthma-like symptoms may continue for months or even years after exposure to the mat known as reactive airways dysfunction syndrome (RADS) which can occur after exposur | ends. This may be due to a non-allergic condition high levels of highly irritating compound. |
| Acute Toxicity | X Carcinogenicity | X |
| Skin Irritation/Corrosion | X Reproductivity | $\checkmark$ |
| Serious Eye Damage/Irritation | $\checkmark$ STOT - Single Exposure | $\checkmark$ |
| Respiratory or Skin sensitisation | X STOT - Repeated Exposure | X |
| Mutagenicity | X Aspiration Hazard | X |
| Legend: $\quad \mathbf{X}$ - Data either not available or does not fill the criteria for classification <br> - Data available to make classification |  |  |

## SECTION 12 ECOLOGICAL INFORMATION

| Stain Proof 40SK Consolidator and Water Repellent <br> (Dry-Treat 40SK) | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Not Available | Not Available | Not Available | Not <br> Available | Not <br> Available |
| acetone | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
|  | LC50 | 96 | Fish | $5-540 \mathrm{mg} / \mathrm{L}$ | 2 |
|  | EC50 | 48 | Crustacea | >100mg/L | 4 |
|  | EC50 | 96 | Algae or other aquatic plants | $20.565 \mathrm{mg} / \mathrm{L}$ | 4 |
|  | NOEC | 240 | Crustacea | 1-866mg/L | 2 |
| dibutyltin dilaurate | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
|  | EC50 | 48 | Crustacea | <0.463mg/L | 2 |
|  | EC50 | 72 | Algae or other aquatic plants | $>1 \mathrm{mg} / \mathrm{L}$ | 2 |
|  | NOEC | 48 | Crustacea | $1.7 \mathrm{mg} / \mathrm{L}$ | 2 |
| octyltriethoxysilane | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
|  | LC50 | 96 | Fish | >0.055mg/L | 2 |
|  | EC50 | 48 | Crustacea | >0.049mg/L | 2 |
|  | EC50 | 72 | Algae or other aquatic plants | $>0.13 \mathrm{mg} / \mathrm{L}$ | 2 |
|  | NOEC | 48 | Crustacea | > $=0.049 \mathrm{mg} / \mathrm{L}$ | 2 |
| tetraethyl silicate | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
|  | LC50 | 96 | Fish | >245mg/L | 2 |
|  | EC50 | 48 | Crustacea | >75mg/L | 2 |
|  | EC50 | 72 | Algae or other aquatic plants | >1-39.3mg/L | 2 |
|  | NOEC | 72 | Algae or other aquatic plants | >=22mg/L | 2 |
| Legend: | Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3. 12 (QSAR) - 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 |  |  |  |  |

[^0]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.
Alkoxysilanes are highly toxic to algae and moderately toxic to aquatic invertebrates. e.g. the daphnid 48 hour LC50 for dimethyldiethoxysilane is 1.25 mg/l, and the $15-$ day algal EC50 for a number of alkoxysilanes is approximately $10 \mathrm{mg} / \mathrm{l}$.
For Ketones: Ketones, unless they are alpha, beta--unsaturated ketones, can be considered as narcosis or baseline toxicity compounds.
Aquatic Fate: Hydrolysis of ketones in water is thermodynamically favourable only for low molecular weight ketones.
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: 2.2BCF: 0.69
Environmental Fate: The relatively long half-life allows acetone to be transported long distances from its emission source.
DO NOT discharge into sewer or waterways.

## Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
| :--- | :--- | :--- | :--- |
| acetone | LOW (Half-life = 14 days) | MEDIUM (Half-life $=116.25$ days) |
| dibutyltin dilaurate | HIGH | HIGH |
| octyltriethoxysilane | HIGH | HIGH |
| tetraethyl silicate | HIGH | HIGH |

## Bioaccumulative potential

| Ingredient | Bioaccumulation |
| :--- | :--- |
| acetone | LOW $(B C F=0.69)$ |
| dibutyltin dilaurate | LOW $(B C F=110)$ |
| octyltriethoxysilane | MEDIUM $($ LogKOW $=4.2394)$ |
| tetraethyl silicate | LOW $($ LogKOW $=0.0362)$ |

Mobility in soil

| Ingredient | Mobility |
| :--- | :--- |
| acetone | HIGH $($ KOC $=1.981)$ |
| dibutyltin dilaurate | LOW $($ KOC $=64610000)$ |
| octyltriethoxysilane | LOW $($ KOC $=187100)$ |
| tetraethyl silicate | LOW $($ KOC $=8766)$ |

## SECTION 13 DISPOSAL CONSIDERATIONS

## Waste treatment methods

|  | * Containers may still present a chemical hazard/ danger when empty. <br> * |
| :--- | :--- |
| Produrn to supplier for reuse/ recycling if possible. |  |

## SECTION 14 TRANSPORT INFORMATION

## Labels Required

| Marine Pollutant | NO |  |
| ---: | :--- | :--- |
| HAZCHEM | •3YE |  |
| Land transport (ADG) |  |  |
| UN number | 1993 |  |
| UN proper shipping name | FLAMMABLE LIQUID, N.O.S. (contains acetone) |  |
| Transport hazard class(es) | Class | 3 |
| Pubrisk | Not Applicable |  |


| Environmental hazard | Not Applicable |  |
| :---: | :---: | :---: |
| Special precautions for user | Special provisions | 274 |
|  | Limited quantity | 1 L |

Air transport (ICAO-IATA / DGR)

| UN number | 1993 |  |  |
| :---: | :---: | :---: | :---: |
| UN proper shipping name | Flammable liquid, n.o.s. * (contains acetone) |  |  |
| Transport hazard class(es) | ICAO/IATA Class 3 |  |  |
|  | ICAO / IATA Subrisk : Not Applicable |  |  |
|  | ERG Code |  |  |
| Packing group | 11 |  |  |
| Environmental hazard | Not Applicable |  |  |
| Special precautions for user | 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 Limited Maximum Qty / Pack |  | 1 L |

Sea transport (IMDG-Code / GGVSee)

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

## SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture
| ACETONE IS FOUND ON THE FOLLOWING REGULATORY LISTS
Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Inventory of Chemical Substances (AICS)
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
| DIBUTYLTIN DILAURATE IS FOUND ON THE FOLLOWING REGULATORY LISTS
Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Inventory of Chemical Substances (AICS)
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 7
Chemical Footprint Project - Chemicals of High Concern List
| OCTYLTRIETHOXYSILANE IS FOUND ON THE FOLLOWING REGULATORY LISTS
Australia Inventory of Chemical Substances (AICS)
| TETRAETHYL SILICATE IS FOUND ON THE FOLLOWING REGULATORY LISTS
Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Inventory of Chemical Substances (AICS)

## National Inventory Status

| National Inventory | Status |
| :--- | :--- |
| Australia - AICS | Yes |
| Canada - DSL | Yes |
| Canada - NDSL | No (acetone; dibutyltin dilaurate; octyltriethoxysilane; tetraethyl silicate) |


| China - IECSC | Yes |
| :--- | :--- |
| Europe - EINEC / ELINCS / NLP | Yes |
| Japan - ENCS | Yes |
| Korea - KECI | Yes |
| New Zealand - NZIoC | Yes |
| Philippines - PICCS | Yes |
| USA - TSCA | Yes |
| Taiwan - TCSI | Yes (octyltriethoxysilane) |
| Mexico - INSQ | Yes |
| Vietnam - NCI | Yes $=$ All CAS declared ingredients are on the inventory |
| Russia - ARIPS | No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets) |
| Legend: |  |

SECTION 16 OTHER INFORMATION

| Revision Date |  |  |  | $06 / 15 / 2020$ |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Initial Date | $01 / 09 / 2020$ |  |  |  |  |
| CONTACT POINT |  |  |  |  |  |
| SDS Version Summary | Issue Date | Sections Updated |  |  |  |
| Version | $06 / 15 / 2020$ | Ingredients, Physical Properties, Name |  |  |  |
| 11.15.1.1.1 |  |  |  |  |  |

## 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.
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.

## 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
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[^0]:    Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

