# JAYBRO INSTANT HAND SANITISER

## SECTION 1

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

### PRODUCT IDENTIFIER

| | |
|---|---|
| PRODUCT NAME | Jaybro Instant Hand Sanitiser |
| SYNONYMS | Hand Wash Sanitising Gel, Product Code: 364 |
| PROPER SHIPPING NAME | ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) |
| OTHER MEANS OF IDENTIFICATION | Not Available |

### RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

| | |
|---|---|
| RELEVANT IDENTIFIED USES: | MSDS are intended for use in the workplace. For domestic-use products, refer to consumer labels.<br>Sanitising hand gel (do not need to rinse with water). |

### DETAILS OF THE MANUFACTURER/IMPORTER

| | | |
|---|---|---|
| REGISTERED COMPANY NAME | Jaybro Civil & Safety Products | JAYBRO NZ LIMITED |
| ADDRESS | 29 Penelope Crescent Arndell Park 2148 NSW Australia | 8/10 Hannigan Drive, St Johns, Auckland 1072, New Zealand |
| TELEPHONE | 1300 885 364 | 0800 865 292 |
| FAX | 1300 885 374 | N/A |
| WEBSITE | www.jaybro.com.au | www.jaybro.co.nz |
| EMAIL | sales@jaybro.com.au | sales@jaybro.co.nz |

### EMERGENCY TELEPHONE NUMBER

| | |
|---|---|
| ASSOCIATION / ORGANISATION | Not Available |
| EMERGENCY PHONE NUMBERS | Not Available |
| OTHER EMERGENCY PHONE NUMBERS | Not Available |

## SECTION 2

## HAZARDS IDENTIFICATION

### CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

- **HAZARDOUS SUBSTANCE. DANGEROUS GOODS. ACCORDING TO THE CRITERIA OF NOHSC, AND THE ADG CODE.**
- **HAZARD RATINGS**

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

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


| | |
|---|---|
| POISONS SCHEDULE | Not Applicable |
| RISK PHRASES | R36 Irritating to eyes.<br>R11 Highly flammable. |
| LEGEND | 1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI |

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*Relevant risk statements are found in section 2*

| INDICATION(S) OF DANGER | F, Xi |
|---|---|

### SAFETY ADVICE

| | |
|---|---|
| S02 | Keep out of reach of children. |
| S09 | Keep container in a well ventilated place. |
| S16 | Keep away from sources of ignition. No smoking. |
| S23 | Do not breathe gas/fumes/vapour/spray. |
| S26 | In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre. |
| S29 | Do not empty into drains. |
| S33 | Take precautionary measures against static discharges. |
| S35 | This material and its container must be disposed of in a safe way. |
| S39 | Wear eye/face protection. |
| S40 | To clean the floor and all objects contaminated by this material, use water and detergent. |
| S41 | In case of fire and/or explosion, DO NOT BREATHE FUMES. |
| S43 | In case of fire use the extinguishing media detailed in section 5 of this SDS. |
| S46 | If swallowed, seek medical advice immediately and show this container or label. |
| S51 | Use only in well ventilated areas. |
| S56 | Dispose of this material and its container at hazardous or special waste collection point. |
| S64 | If swallowed, rinse mouth with water (only if the person is conscious). |

| OTHER HAZARDS | ▸ Possible cancer-causing agent*. |
|---|---|

## SECTION 3

## COMPOSITION / INFORMATION ON INGREDIENTS

### SUBSTANCES

See section below for composition of Mixtures

### MIXTURES

| CAS NO. | % [WEIGHT] | NAME |
|---|---|---|
| 64-17-5 | >60 | ethanol |
| 3380-34-5 | <1 | 2,4,4'-trichloro-2'-hydroxydiphenyl ether |
| Not Available | NotSpec. | non hazardous ingredients |
| | balance | non hazardous ingredients |

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

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## 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 | Wipe off excess with absorbent tissue or towel. |
| INHALATION | ▸ If fumes or combustion products are inhaled remove from contaminated area.<br>▸ Lay patient down. Keep warm and rested.<br>▸ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.<br>▸ Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.<br>▸ Transport to hospital, or doctor. |
| INGESTION | ▸ If swallowed do NOT induce vomiting.<br>▸ If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.<br>▸ Observe the patient carefully.<br>▸ Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.<br>▸ Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.<br>▸ Seek medical advice. |

### INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

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
## FIREFIGHTING MEASURES

### EXTINGUISHING MEDIA

| | |
| --- | --- |
| | ▸ Alcohol stable foam.<br>▸ Dry chemical powder.<br>▸ BCF (where regulations permit).<br>▸ Carbon dioxide.<br>▸ Water spray or fog - Large fires only. |

### 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. |

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### ADVICE FOR FIREFIGHTERS

| | |
|---|---|
| FIRE FIGHTING | ▸ Alert Fire Brigade and tell them location and nature of hazard.<br>▸ May be violently or explosively reactive.<br>▸ Wear breathing apparatus plus protective gloves in the event of a fire.<br>▸ Prevent, by any means available, spillage from entering drains or water course.<br>▸ Consider evacuation (or protect in place).<br>▸ Fight fire from a safe distance, with adequate cover.<br>▸ If safe, switch off electrical equipment until vapour fire hazard removed.<br>▸ Use water delivered as a fine spray to control the fire and cool adjacent area.<br>▸ Avoid spraying water onto liquid pools.<br>▸ Do not approach containers suspected to be hot.<br>▸ Cool fire exposed containers with water spray from a protected location.<br>▸ If safe to do so, remove containers from path of fire. |
| FIRE/EXPLOSION HAZARD | ▸ Liquid and vapour are highly flammable.<br>▸ Severe fire hazard when exposed to heat, flame and/or oxidisers.<br>▸ Vapour may travel a considerable distance to source of ignition.<br>▸ Heating may cause expansion or decomposition leading to violent rupture of containers.<br>▸ On combustion, may emit toxic fumes of carbon monoxide (CO).<br>Combustion products include:, carbon dioxide ($CO_2$), hydrogen chloride, phosgene, other pyrolysis products typical of burning organic material. |

## SECTION 6

## ACCIDENTAL RELEASE MEASURES

### PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

| | |
|---|---|
| MINOR SPILLS | ▸ Remove all ignition sources.<br>▸ Clean up all spills immediately.<br>▸ Avoid breathing vapours and contact with skin and eyes.<br>▸ Control personal contact with the substance, by using protective equipment.<br>▸ Contain and absorb small quantities with vermiculite or other absorbent material.<br>▸ Wipe up.<br>▸ Collect residues in a flammable waste container. |
| MAJOR SPILLS | ▸ Clear area of personnel and move upwind.<br>▸ Alert Fire Brigade and tell them location and nature of hazard.<br>▸ May be violently or explosively reactive.<br>▸ Wear breathing apparatus plus protective gloves.<br>▸ Prevent, by any means available, spillage from entering drains or water course.<br>▸ Consider evacuation (or protect in place).<br>▸ No smoking, naked lights or ignition sources.<br>▸ Increase ventilation.<br>▸ Stop leak if safe to do so.<br>▸ Water spray or fog may be used to disperse /absorb vapour.<br>▸ Contain spill with sand, earth or vermiculite.<br>▸ Use only spark-free shovels and explosion proof equipment.<br>▸ Collect recoverable product into labelled containers for recycling.<br>▸ Absorb remaining product with sand, earth or vermiculite.<br>▸ Collect solid residues and seal in labelled drums for disposal.<br>▸ Wash area and prevent runoff into drains.<br>▸ If contamination of drains or waterways occurs, advise emergency services. |

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

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## 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.<br>▸ Use in a well-ventilated area.<br>▸ Prevent concentration in hollows and sumps.<br>▸ DO NOT enter confined spaces until atmosphere has been checked.<br>▸ Avoid smoking, naked lights, heat or ignition sources.<br>▸ When handling, DO NOT eat, drink or smoke.<br>▸ Vapour may ignite on pumping or pouring due to static electricity.<br>▸ DO NOT use plastic buckets.<br>▸ Earth and secure metal containers when dispensing or pouring product.<br>▸ Use spark-free tools when handling.<br>▸ Avoid contact with incompatible materials.<br>▸ Keep containers securely sealed.<br>▸ Avoid physical damage to containers.<br>▸ Always wash hands with soap and water after handling.<br>▸ Work clothes should be laundered separately.<br>▸ Use good occupational work practice.<br>▸ Observe manufacturer's storage and handling recommendations contained within this MSDS.<br>▸ Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions. |
| OTHER INFORMATION | ▸ Store in original containers in approved flame-proof area.<br>▸ No smoking, naked lights, heat or ignition sources.<br>▸ DO NOT store in pits, depressions, basements or areas where vapours may be trapped.<br>▸ Keep containers securely sealed.<br>▸ Store away from incompatible materials in a cool, dry well ventilated area.<br>▸ Protect containers against physical damage and check regularly for leaks.<br>▸ Observe manufacturer's storage and handling recommendations contained within this MSDS. |

### CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

| | |
| --- | --- |
| SUITABLE CONTAINER | ▸ Packing as supplied by manufacturer.<br>▸ Plastic containers may only be used if approved for flammable liquid.<br>▸ Check that containers are clearly labelled and free from leaks.<br>▸ For low viscosity materials (i) : Drums and jerry cans must be of the non-removable head type. (ii) : Where a can is to be used as an inner package, the can must have a screwed enclosure.<br>▸ For materials with a viscosity of at least 2680 cSt. (23 deg. C)<br>▸ For manufactured product having a viscosity of at least 250 cSt. (23 deg. C)<br>▸ 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.<br>▸ Where combination packages are used, and the inner packages are of glass, there must be sufficient inert cushioning material in contact with inner and outer packages<br>▸ In addition, where inner packagings are glass and contain liquids of packing group I there must be sufficient inert absorbent to absorb any spillage, unless the outer packaging is a close fitting moulded plastic box and the substances are not incompatible with the plastic. |
| STORAGE INCOMPATIBILITY | ▸ Avoid oxidising agents, acids, acid chlorides, acid anhydrides, chloroformates.<br>▸ Avoid strong bases. |

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## 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 | ethanol | Ethyl alcohol | 1880 mg/m3 / 1000 ppm | Not Available | 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 |

| INGREDIENT | ORIGINAL IDLH | REVISED IDLH |
|---|---|---|
| ethanol | 15,000 ppm | 3,300 [LEL] ppm |
| 2,4,4'-trichloro-2'-hydroxydiphenyl ether | Not Available | Not Available |
| non hazardous ingredients | Not Available | Not Available |

### 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. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.

Employers may need to use multiple types of controls to prevent employee overexposure.

For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. Ventilation equipment should be explosion-resistant.

Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

| TYPE OF CONTAMINANT | AIR SPEED |
|---|---|
| solvent, vapours, degreasing etc., evaporating from tank (in still air). | 0.25-0.5 m/s (50-100 f/min) |
| aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation). | 0.5-1 m/s (100-200 f/min.) |
| direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion). | 1-2.5 m/s (200-500 f/min) |

Within each range the appropriate value depends on:

| LOWER END OF THE RANGE | UPPER END OF THE RANGE |
|---|---|
| 1: Room air currents minimal or favourable to capture | 1: Disturbing room air currents |
| 2: Contaminants of low toxicity or of nuisance value only | 2: Contaminants of high toxicity |
| 3: Intermittent, low production. | 3: High production, heavy use |
| 4: Large hood or large air mass in motion | 4: Small hood - local control only |

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min.) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

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| PERSONAL PROTECTION |  |
| EYE AND FACE PROTECTION | ▸ Safety glasses with side shields.<br>▸ Chemical goggles.<br>▸ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. 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 Hands/Feet Protection below |
| HANDS/FEET PROTECTION | ▸ Bare skin is cleaned with this material.<br>▸ Application of hand cream / barrier cream after use is recommended. |
| BODY PROTECTION | See Other Protection below |
| OTHER PROTECTION | ▸ Overalls.<br>▸ PVC Apron.<br>▸ PVC protective suit may be required if exposure severe.<br>▸ Eyewash unit.<br>▸ Ensure there is ready access to a safety shower.<br>▸ Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.<br>▸ For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets).<br>▸ Non sparking safety or conductive footwear should be considered. Conductive footwear describes a boot or shoe with a sole made from a conductive compound chemically bound to the bottom components, for permanent control to electrically ground the foot an shall dissipate static electricity from the body to reduce the possibility of ignition of volatile compounds.<br>▸ Electrical resistance must range between 0 to 500,000 ohms. Conductive shoes should be stored in lockers close to the room in which they are worn. Personnel who have been issued conductive footwear should not wear them from their place of work to their homes and return. |
| THERMAL HAZARDS | Not Available |

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### RECOMMENDED MATERIAL(S)

#### GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the: "Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the computer-generated selection:
Jaybro Instant Hand Sanitiser

| MATERIAL | CPI |
|---|---|
| BUTYL | C |
| NATURAL RUBBER | C |
| NATURAL+NEOPRENE | C |
| NEOPRENE | C |
| NITRILE | C |
| NITRILE+PVC | C |
| PE/EVAL/PE | C |
| PVC | C |

*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 AK-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN143:2000 & 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 | MAXIMUM GAS/VAPOUR CONCENTRATION PRESENT IN AIR P.P.M. (BY VOLUME) | HALF-FACE RESPIRATOR | FULL-FACE RESPIRATOR |
|---|---|---|---|
| up to 10 | 1000 | A-AUS / Class1 | – |
| up to 50 | 1000 | – | A-AUS / Class 1 |
| up to 50 | 5000 | Airline * | – |
| up to 100 | 5000 | – | A-2 |
| up to 100 | 10000 | – | A-3 |
| 100+ | | – | Airline** |

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

## SECTION 9

## PHYSICAL AND CHEMICAL PROPERTIES

### INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|---|---|---|---|
| APPEARANCE | Highly flammable clear gel; mixes with water. | | |
| PHYSICAL STATE | Gel | RELATIVE DENSITY (WATER = 1) | 0.86-0.88 |
| ODOUR | Not Available | PARTITION COEFFICIENT N-OCTANOL / WATER | Not Available |
| ODOUR THRESHOLD | Not Available | AUTO-IGNITION TEMPERATURE (°C) | Not Applicable |
| PH (AS SUPPLIED) | 6.5-8.0 | DECOMPOSITION TEMPERATURE | Not Available |
| MELTING POINT / FREEZING POINT (°C) | Not Available | VISCOSITY (CST) | Not Available |
| INITIAL BOILING POINT AND BOILING RANGE (°C) | ~ >78 | MOLECULAR WEIGHT (G/MOL) | Not Applicable |
| FLASH POINT (°C) | 18 (CC) | TASTE | Not Available |
| EVAPORATION RATE | Not Available | EXPLOSIVE PROPERTIES | Not Available |
| FLAMMABILITY | HIGHLY FLAMMABLE. | OXIDISING PROPERTIES | Not Available |
| UPPER EXPLOSIVE LIMIT (%) | Not Available | SURFACE TENSION (DYN/CM OR MN/M) | Not Available |
| LOWER EXPLOSIVE LIMIT (%) | Not Available | VOLATILE COMPONENT (%VOL) | 66 |
| VAPOUR PRESSURE (KPA) | Not Available | GAS GROUP | Not Available |
| SOLUBILITY IN WATER (G/L) | Miscible | PH AS A SOLUTION (1%) | Not Available |
| VAPOUR DENSITY (AIR = 1) | Not Available | VOC G/L | Not Available |

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## SECTION 10
### STABILITY AND REACTIVITY

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|---|---|
| REACTIVITY | See section 7 |
| CHEMICAL STABILITY | ▸ Unstable in the presence of incompatible materials.<br>▸ Product is considered stable.<br>▸ Hazardous polymerisation will not occur. |
| POSSIBILITY OF HAZARDOUS REACTIONS | See section 7 |
| CONDITIONS TO AVOID | See section 7 |
| INCOMPATIBLE MATERIALS | See section 7 |
| HAZARDOUS DECOMPOSITION PRODUCTS | See section 5 |

## SECTION 11
### TOXICOLOGICAL INFORMATION

#### INFORMATION ON TOXICOLOGICAL EFFECTS

| | |
|---|---|
| INHALED | Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination. |
| INGESTION | Accidental ingestion of the material may be damaging to the health of the individual.<br>Considered an unlikely route of entry in commercial/industrial environments |
| SKIN CONTACT | Not considered an irritant through normal use.<br>Open cuts, abraded or irritated skin should not be exposed to this material |
| EYE | Direct contact of the eye with ethanol (alcohol) may cause an immediate stinging and burning sensation, with reflex closure of the lid, and a temporary, tearing injury to the cornea together with redness of the conjunctiva. Discomfort may last 2 days but usually the injury heals without treatment.<br>There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain. |
| CHRONIC<br>(CONT. TO NEXT PAGE) | Principal hazards are accidental eye contact and cleaner overuse. Overuse or obsessive cleaner use may lead to defatting of the skin and may cause irritation, drying, cracking, leading to dermatitis.<br>Prolonged exposure to ethanol may cause damage to the liver and cause scarring. It may also worsen damage caused by other agents. |

| | | |
|---|---|---|
| JAYBRO INSTANT HAND SANITISER | TOXICITY | IRRITATION |
| | Not Available | Not Available |
| ETHANOL | TOXICITY | IRRITATION |
| | Dermal (rabbit) LD50: 17100 mg/kg[1] | Eye (rabbit): 500 mg SEVERE |
| | Inhalation (rat) LC50: 64000 ppm/4h[2] | Eye (rabbit):100mg/24hr-moderate |
| | Oral (rat) LD50: >11872769 mg/kg[1] | Skin (rabbit):20 mg/24hr-moderate |
| | | Skin (rabbit):400 mg (open)-mild |
| 2,4,4'-TRICHLORO-2'-HYDROXYDIPHENYL ETHER | TOXICITY | IRRITATION |
| | Dermal (rabbit) LD50: >6000 mg/kg**[2] | Eye: SEVERE** |
| | Oral (rat) LD50: 3700 mg/kgd[2] | Skin (human):0.75 mg/3d-I- mild |
| | | Skin (rabbit): 10% - mild |

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

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|---|---|
| ETHANOL | 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. |
| 2,4,4'-TRICHLORO-2'-HYDROXYDIPHENYL ETHER | Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. Industrial bronchitis, on the other hand, is a disorder that occurs as result of exposure due to high concentrations of irritating substance (often particulate in nature) and is completely reversible after exposure ceases. The disorder is characterised by dyspnea, cough and mucus production.<br>**For triclosan:** Triclosan is readily absorbed by the skin, through the mouth lining and digestive tract, and through the mucosal tissues if given through the vagina. It is excreted in the urine and stools, mostly unchanged; it has been detected in the liver and fat. Testing in humans showed that triclosan did not sensitise or irritate the skin. Animal testing showed that triclosan did not cause reproductive toxicity and did not cause abnormalities in development below exposure levels of 150 mg/kg/day; swallowing 50mg/kg of the substance was harmful to both the foetus and the mother. There have not been reports of birth defects occurring. Triclosan has been detected in human breast milk. Triclosan has been shown to inhibit the growth of cancer cells, resulting in their death. Only one out of eighteen tests showed triclosan to cause mutations, and a repeat of that study was negative. Studies have shown that triclosan can have both male- and female-like hormonal effects.<br>Side-reactions during manufacture of the parent compound may result in the production of trace amounts of polyhalogenated aromatic hydrocarbon(s). Halogenated phenols, and especially their alkali salts, can condense above 300 deg.<br>Polyhalogenated aromatic hydrocarbons (PHAHs) can cause effects on hormones and mimic thyroid hormone. Acne, discharge in the eye, eyelid swellings and visual disturbances may occur.<br>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.<br>*[Van Waters Rogers]* [Thompson Research] *** |

| | | | |
|---|---|---|---|
| ACUTE TOXICITY | ⊘ | CARCINOGENICITY | ⊘ |
| SKIN IRRITATION/CORROSION | ⊘ | REPRODUCTIVITY | ⊘ |
| SERIOUS EYE DAMAGE/IRRITATION | ✓ | STOT - SINGLE EXPOSURE | ⊘ |
| RESPIRATORY OR SKIN SENSITISATION | ⊘ | STOT - REPEATED EXPOSURE | ⊘ |
| MUTAGENICITY | ⊘ | ASPIRATION HAZARD | ⊘ |

| | |
|---|---|
| LEGEND | ✓ – Data required to make classification available<br>✗ – Data available but does not fill the criteria for classification<br>⊘ – Data Not Available to make classification |

## SECTION 12

## ECOLOGICAL INFORMATION

### TOXICITY

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) |
| 2,4,4'-trichloro-2'-hydroxydiphenyl ether | HIGH | HIGH |

CONTINUED..

### BIOACCUMULATIVE POTENTIAL

| INGREDIENT | BIOACCUMULATION |
| --- | --- |
| ethanol | LOW (LogKOW = -0.31) |
| 2,4,4'-trichloro-2'-hydroxydiphenyl ether | LOW (BCF = 90) |

### MOBILITY IN SOIL

| INGREDIENT | MOBILITY |
| --- | --- |
| ethanol | HIGH (KOC = 1) |
| 2,4,4'-trichloro-2'-hydroxydiphenyl ether | LOW (KOC = 18420) |

## SECTION 13
## DISPOSAL CONSIDERATIONS

### WASTE TREATMENT METHODS

| | |
| --- | --- |
| PRODUCT / PACKAGING DISPOSAL | ▸ DO NOT allow wash water from cleaning or process equipment to enter drains.<br>▸ It may be necessary to collect all wash water for treatment before disposal.<br>▸ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.<br>▸ Where in doubt contact the responsible authority.<br>▸ Recycle wherever possible.<br>▸ Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.<br>▸ Dispose of by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or Incineration in a licenced apparatus (after admixture with suitable combustible material).<br>▸ Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed. |

## SECTION 14
## TRANSPORT INFORMATION

### LABELS REQUIRED

| | |
| --- | --- |
| |  |
| MARINE POLLUTANT | NO |
| HAZCHEM | 2YE |

### LAND TRANSPORT (ADG)

| | |
| --- | --- |
| UN NUMBER | 1170 |
| PACKING GROUP | II |
| UN PROPER SHIPPING NAME | ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) |
| ENVIRONMENTAL HAZARD | No relevant data |
| TRANSPORT HAZARD CLASS(ES) | CLASS: 3<br>SUBRISK: Not Applicable |
| SPECIAL PRECAUTIONS FOR USER | SPECIAL PROVISIONS: 144<br>LIMITED QUANTITY: 1 L |

CONTINUED..

### AIR TRANSPORT (ICAO-IATA / DGR)

| | |
|---|---|
| UN NUMBER | 1170 |
| PACKING GROUP | II |
| UN PROPER SHIPPING NAME | Ethanol or Ethanol solution |
| ENVIRONMENTAL HAZARD | No relevant data |
| TRANSPORT HAZARD CLASS(ES) | ICAO/IATA CLASS: 3<br>ICAO / IATA SUBRISK: Not Applicable<br>ERG CODE: 3L |
| SPECIAL PRECAUTIONS FOR USER | SPECIAL PROVISIONS: A3A58A180<br>CARGO ONLY PACKING INSTRUCTIONS: 364<br>CARGO ONLY MAXIMUM QTY / PACK: 60 L<br>PASSENGER AND CARGO PACKING INSTRUCTIONS: 353<br>PASSENGER AND CARGO MAXIMUM QTY / PACK: 5 L<br>PASSENGER AND CARGO LIMITED QUANTITY PACKING INSTRUCTIONS: Y341<br>PASSENGER AND CARGO LIMITED MAXIMUM QTY / PACK: 1 L |

### SEA TRANSPORT (IMDG-CODE / GGVSEE)

| | |
|---|---|
| UN NUMBER | 1170 |
| PACKING GROUP | II |
| UN PROPER SHIPPING NAME | ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) |
| ENVIRONMENTAL HAZARD | Not Applicable |
| TRANSPORT HAZARD CLASS(ES) | IMDG CLASS: 3<br>IMDG SUBRISK: Not Applicable |
| SPECIAL PRECAUTIONS FOR USER | EMS NUMBER: F-E , S-D<br>SPECIAL PROVISIONS: 144<br>LIMITED QUANTITIES: 1 L |

## SECTION 15
## REGULATORY INFORMATION

### SAFETY, HEALTH & ENVIRONMENTAL REGULATIONS / LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

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

Australia Exposure Standards

Australia Inventory of Chemical Substances (AICS)

Australia Hazardous Substances Information System - Consolidated Lists

**2,4,4'-TRICHLORO-2'-HYDROXYDIPHENYL ETHER(3380-34-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Hazardous Substances Information System - Consolidated Lists

Australia Inventory of Chemical Substances (AICS)

CONTINUED..

| NATIONAL INVENTORY | STATUS |
| --- | --- |
| Australia - AICS | Y |
| Canada - DSL | Y |
| Canada - NDSL | N (ethanol; 2,4,4'-trichloro-2'-hydroxydiphenyl ether) |
| China - IECSC | Y |
| Europe - EINEC / ELINCS / NLP | Y |
| Japan - ENCS | Y |
| Korea - KECI | Y |
| New Zealand - NZIoC | Y |
| Philippines - PICCS | Y |
| USA - TSCA | Y |

| LEGEND | Y = All ingredients are on the inventory 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

### INGREDIENTS WITH MULTIPLE CAS NUMBERS

| 2,4,4'-TRICHLORO-2'-HYDROXYDIPHENYL ETHER | 112099-35-1, 164325-69-3, 261921-78-2, 3380-34-5, 88032-08-0 |
| --- | --- |

### OTHER INFORMATION

| MSDS PREPARED BY | Jaybro |
| --- | --- |
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