Auto Klene Solutions

Chemwatch Hazard Alert Code: 1

Chemwatch: 5226-30

Issue Date: 01/11/2019 Version No: 5.1 Print Date: 03/08/2022 Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements S.GHS.AUS.EN.E

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

Product Identifier

| Product name | SNAKE SKIN GLASS CLEANER |
|-------------------------------|--------------------------|
| Chemical Name | Not Applicable |
| Synonyms | Not Available |
| Chemical formula | Not Applicable |
| Other means of identification | Not Available |

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

| Relevant identified uses | Window cleaner. |
|--------------------------|-----------------|
|--------------------------|-----------------|

Details of the supplier of the safety data sheet

| Registered company name | Auto Klene Solutions |
|-------------------------|--|
| Address | 1/83 Merrindale Drive Croydon VIC 3136 Australia |
| Telephone | +61 3 8761 1900 |
| Fax | +61 3 8761 1955 |
| Website | http://www.autoklene.com |
| Email | info@autoklene.com |

Emergency telephone number

| - - - - - - - - - - - | |
|-----------------------------------|---------------|
| Association / Organisation | Not Available |
| Emergency telephone numbers | Not Available |
| Other emergency telephone numbers | Not Available |

SECTION 2 Hazards identification

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

ChemWatch Hazard Ratings

| | Min | Max | |
|--------------|-----|-----|-------------------------|
| Flammability | 1 | | |
| Toxicity | 1 | 1 | 0 = Minimum |
| Body Contact | 1 | 1 | 1 = Low |
| Reactivity | 0 | | 2 = Moderate |
| Chronic | 1 📕 | 1 | 3 = High 4 = Extreme |

| Poisons Schedule | Not Applicable |
|--------------------|--|
| Classification [1] | Serious Eye Damage/Eye Irritation Category 2A |
| Legend: | 1. Classified by Chernwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI |

Label elements



Signal word

Warning

Hazard statement(s)

| AUH018 | In use, may form flammable/explosive vapour/air mixture. |
|--------|--|
| AUH019 | May form explosive peroxides. |

H319 Causes serious eye irritation.

Precautionary statement(s) Prevention

| P280 | Wear protective gloves, protective clothing, eye protection and face protection. |
|------|--|
| P264 | Wash all exposed external body areas thoroughly after handling. |
| | |

Precautionary statement(s) Response

| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
|----------------|--|
| P337+P313 | If eye irritation persists: Get medical advice/attention. |

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

Not Applicable

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

| CAS No | %[weight] | Name |
|---------------|--|--------------|
| 67-63-0 | 5-10 | isopropanol |
| Not Available | 2-10 | butyl glycol |
| Not Available | trace | dye |
| 7732-18-5 | >60 | water |
| Legend: | 1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&L * EU IOELVs available | |

SECTION 4 First aid measures

Description of first aid measures

| Eye Contact | If this product comes in contact with the eyes: Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. |
|--------------|--|
| Skin Contact | If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation. |
| Inhalation | If 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. Transport to hospital, or doctor. |
| Ingestion | If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice. 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. Treat symptomatically.

To treat poisoning by the higher aliphatic alcohols (up to C7):

- Gastric lavage with copious amounts of water.
- It may be beneficial to instill 60 ml of mineral oil into the stomach.
- Oxygen and artificial respiration as needed.
- Electrolyte balance: it may be useful to start 500 ml. M/6 sodium bicarbonate intravenously but maintain a cautious and conservative attitude toward electrolyte replacement unless shock or severe acidosis threatens.
- To protect the liver, maintain carbohydrate intake by intravenous infusions of glucose.
- + Haemodialysis if coma is deep and persistent. [GOSSELIN, SMITH HODGE: Clinical Toxicology of Commercial Products, Ed 5)

- 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 l/min.
- Monitor and treat, where necessary, for shock.
- Monitor and treat, where necessary, for pulmonary oedema.
- Anticipate and treat, where necessary, for seizures
- DO NOT use emetics. Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.
- Give activated charcoal.

ADVANCED TREATMENT

ADVANCED INCAMILINI

- 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.
- If the patient is hypoglycaemic (decreased or loss of consciousness, tachycardia, pallor, dilated pupils, diaphoresis and/or dextrose strip or glucometer readings below 50 mg), give 50% dextrose.
- Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.
- Drug therapy should be considered for pulmonary oedema.
- Treat seizures with diazepam
- Proparacaine hydrochloride should be used to assist eye irrigation

EMERGENCY DEPARTMENT

- Laboratory analysis of complete blood count, serum electrolytes, BUN, creatinine, glucose, urinalysis, baseline for serum aminotransferases (ALT and AST), calcium, phosphorus and magnesium, may assist in establishing a treatment regime. Other useful analyses include anion and osmolar gaps, arterial blood gases (ABGs), chest radiographs and electrocardiograph.
- Positive end-expiratory pressure (PEEP)-assisted ventilation may be required for acute parenchymal injury or adult respiratory distress syndrome.
- Acidosis may respond to hyperventilation and bicarbonate therapy.
- Haemodialysis might be considered in patients with severe intoxication.
- Consult a toxicologist as necessary. BRONSTEIN, A.C. and CURRANCE, P.L. EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

For C8 alcohols and above.

Symptomatic and supportive therapy is advised in managing patients.

SECTION 5 Firefighting measures

Extinguishing media

The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas.

Though the material is non-combustible, evaporation of water from the mixture, caused by the heat of nearby fire, may produce floating layers of combustible substances. In such an event consider:

- foam.
- dry chemical powder.
- carbon dioxide.

Special hazards arising from the substrate or mixture

Fire Incompatibility None known.

Advice for firefighters

| Advice for menginers | |
|-----------------------|---|
| Fire Fighting | Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water courses. Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. |
| Fire/Explosion Hazard | WARNING: In use may form flammable/ explosive vapour-air mixtures. Combustible. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). May emit acrid smoke. Mists containing combustible materials may be explosive. Combustion products include: carbon dioxide (CO2) other pyrolysis products typical of burning organic material. WARNING: Long standing in contact with air and light may result in the formation of potentially explosive peroxides. |
| HAZCHEM | Not Applicable |

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

| 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. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal. |
|--------------|--|
| Major Spills | Moderate hazard. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. No smoking, naked lights or ignition sources. Increase ventilation. |

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

SECTION 7 Handling and storage

Precautions for safe handling 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. Safe handling Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. • DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. Store in original containers. Keep containers securely sealed. No smoking, naked lights or ignition sources. Other information Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.

Conditions for safe storage, including any incompatibilities

| Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks. | Suitable container |
|---|-------------------------|
| Storage incompatibility Avoid reaction with oxidising agents | Storage incompatibility |

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 | isopropanol | Isopropyl alcohol | 400 ppm / 983 mg/m3 | 1230 mg/m3 / 500 ppm | Not Available | Not Available |
| | | | | | | |

Emergency Limits

| Ingredient | TEEL-1 | TEEL-2 | | TEEL-3 | |
|-------------|---------------|-----------|---------------|-------------|--|
| isopropanol | 400 ppm | 2000* ppm | | 12000** ppm | |
| Ingredient | Original IDLH | | Revised IDLH | | |
| isopropanol | 2,000 ppm | | Not Available | | |
| water | 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. |
|-------------------------------------|---|
| 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 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. |
|-------------------------|---|
| Skin protection | See Hand protection below |
| Hands/feet protection | Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended. |
| Body protection | See Other protection below |
| Other protection | Overalls. P.V.C apron. Barrier cream. Skin cleansing cream. Eye wash unit. |

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:

SNAKE SKIN GLASS CLEANER

| Material | СРІ |
|-------------------|-----|
| NEOPRENE | А |
| BUTYL | C |
| NAT+NEOPR+NITRILE | С |
| NATURAL RUBBER | С |
| NATURAL+NEOPRENE | С |
| NITRILE | С |
| NITRILE+PVC | С |
| PE/EVAL/PE | С |
| PVA | С |
| PVC | С |
| VITON | С |

* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Blue liquid; mixes with water. Appearance Physical state Liquid Relative density (Water = 1) 0.9 Partition coefficient n-octanol Odour Not Available Not Available / water Odour threshold Not Available Auto-ignition temperature (°C) Not Available Decomposition pH (as supplied) 6-7 Not Available temperature (°C) Melting point / freezing point Not Available Viscosity (cSt) Not Available (°C) Initial boiling point and boiling Not Available Molecular weight (g/mol) Not Applicable range (°C) Taste Flash point (°C) Not Available Not Available Explosive properties Evaporation rate Not Available Not Available

Respiratory protection

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

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

| Required Minimum Protection Factor | Half-Face Respirator | Full-Face Respirator | Powered Air Respirator |
|---------------------------------------|-------------------------|-------------------------|---------------------------|
| up to 10 x ES | Air-line* | A-2 | A-PAPR-2 ^ |
| up to 20 x ES | - | A-3 | - |
| 20+ x ES | - | Air-line** | - |

 * - Continuous-flow; ** - Continuous-flow or positive pressure demand ^ - Full-face

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

- Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

| Flammability | Not Available | Oxidising properties | Not Available |
|---------------------------|---------------|--------------------------------------|---------------|
| Upper Explosive Limit (%) | Not Available | Surface Tension (dyn/cm or mN/m) | Not Available |
| Lower Explosive Limit (%) | Not Available | Volatile Component (%vol) | Not Available |
| Vapour pressure (kPa) | Not Available | Gas group | Not Available |
| Solubility in water | Miscible | pH as a solution (Not Available%) | Not Available |
| Vapour density (Air = 1) | Not Available | VOC g/L | Not Available |

SECTION 10 Stability and reactivity

| See section 7 |
|--|
| Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur. |
| See section 7 |
| See section 7 |
| See section 7 |
| See section 5 |
| - |

SECTION 11 Toxicological information

ISOPROPANOL

Information on toxicological effects

| internation on texteelogical e | 10010 | | | |
|--------------------------------|---|---|--|--|
| Inhaled | Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo. Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual. There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. | | | |
| Ingestion | Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733) Accidental ingestion of the material may be damaging to the health of the individual. | | | |
| Skin Contact | Repeated exposure may cause skin cracking, flaking or drying following normal handling and use. There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. | | | |
| Eye | There is some evidence to suggest that this material can cause eye irritation and damage in some persons. | | | |
| Chronic | Long term, or repeated exposure of isopropanol may caus Repeated inhalation exposure to isopropanol may produce effects only at exposure levels that produce toxic effects in | e sleepiness, inco-ordination and liver degeneration. Animal data show developmental n adult animals. Isopropanol does not cause genetic damage. n skin contacts with isopropanol. Chronic alcoholics are more tolerant of the whole-body | | |
| SNAKE SKIN GLASS | ΤΟΧΙΟΙΤΥ | IRRITATION | | |
| CLEANER | Not Available | Not Available | | |
| | ΤΟΧΙΟΙΤΥ | IRRITATION | | |
| | Dermal (rabbit) LD50: 12800 mg/kg ^[2] | Eye (rabbit): 10 mg - moderate | | |
| isopropanol | Inhalation(Mouse) LC50; 53 mg/L4h ^[2] | Eye (rabbit): 100 mg - SEVERE | | |
| | Oral (Mouse) LD50; 3600 mg/kg ^[2] | Eye (rabbit): 100mg/24hr-moderate | | |
| | | Skin (rabbit): 500 mg - mild | | |
| | тохісіту | IRRITATION | | |
| water | Oral (Rat) LD50; >90000 mg/kg ^[2] | Not Available | | |
| | Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances | | | |

Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia. 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 (often particles) and is completely reversible after exposure ceases. The disorder is characterized by difficulty breathing, cough and mucus production.

| | Isopropanol is irritating to the eyes, nose and throat but generally not to the skin. Prolonged high dose exposure may also produce depression of the central nervous system and drowsiness. Few have reported skin irritation. It can be absorbed from the skin or when inhaled. Intentional swallowing is common particularly among alcoholics or suicide victims and also leads to fainting, breathing difficulty, nausea, vomiting and headache. In the absence of unconsciousness, recovery usually occurred. Repeated doses may damage the kidneys. 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. The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing. | | | | |
|---|---|------------------------|---|--|--|
| SNAKE SKIN GLASS CLEANER & WATER | No significant acute toxicological data identified in literature search. | | | | |
| 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: X – Data either not available or does not fill the criteria for classification - Data available to make classification | | | | | |

SECTION 12 Ecological information

Toxicity

| SNAKE SKIN GLASS CLEANER | Endpoint | Test Duration (hr) | Species | Value | Source |
|-----------------------------|------------------|--------------------|---|------------------|------------------|
| | Not Available | Not Available | Not Available | Not Available | Not Available |
| | Endpoint | Test Duration (hr) | Species | Value | Source |
| | EC50(ECx) | 24h | Algae or other aquatic plants | 0.011mg/L | 4 |
| | EC50 | 72h | Algae or other aquatic plants | >1000mg/l | 1 |
| isopropanol | EC50 | 48h | Crustacea | 7550mg/l | 4 |
| | LC50 | 96h | Fish | 4200mg/l | 4 |
| | EC50 | 96h | Algae or other aquatic plants | >1000mg/l | 1 |
| | Endpoint | Test Duration (hr) | Species | Value | Source |
| water | Not Available | Not Available | Not Available | Not Available | Not Available |
| Legend: | Ecotox databa | | HA Registered Substances - Ecotoxicological Informat Aquatic Hazard Assessment Data 6. NITE (Japan) - Bi | | |

Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|-------------|---------------------------|--------------------------|
| isopropanol | LOW (Half-life = 14 days) | LOW (Half-life = 3 days) |
| water | LOW | LOW |

Bioaccumulative potential

| Ingredient | Bioaccumulation | |
|------------------|---------------------|--|
| isopropanol | LOW (LogKOW = 0.05) | |
| Mobility in soil | | |

| Mobility III Soli | |
|-------------------|-------------------|
| Ingredient | Mobility |
| isopropanol | HIGH (KOC = 1.06) |

SECTION 13 Disposal considerations

| Waste treatment methods Product / Packaging disposal | Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. A Hierarchy of Controls seems to be common - the user should investigate: Reduction Reuse Recycling Disposal (if all else fails) This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate. |
|--|---|
|--|---|

| | Recycle wherever possible or consult manufacturer for recycling options. Consult State Land Waste Authority for disposal. Bury or incinerate residue at an approved site. |
|----------------------------------|---|
| | Recycle containers if possible, or dispose of in an authorised landfill. |
| SECTION 14 Transport information | |

| Labels Required | | |
|--|----------------|--|
| Marine Pollutant | NO | |
| HAZCHEM | Not Applicable | |
| Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS | | |

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

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

Not Applicable

Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

| Product name | Group |
|--------------|---------------|
| isopropanol | Not Available |
| water | Not Available |

Transport in bulk in accordance with the ICG Code

| Product name | Ship Type |
|--------------|---------------|
| isopropanol | Not Available |
| water | Not Available |

SECTION 15 Regulatory information

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

isopropanol is found on the following regulatory lists

| Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals | |
|--|--|
| Australian Inventory of Industrial Chemicals (AIIC) | |

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

water is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

National Inventory Status

| National Inventory | Status |
|--|---|
| Australia - AIIC / Australia Non-Industrial Use | Yes |
| Canada - DSL | Yes |
| Canada - NDSL | No (isopropanol; water) |
| 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 |
| Mexico - INSQ | Yes |
| Vietnam - NCI | Yes |
| Russia - FBEPH | Yes |
| Legend: | Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration. |

SECTION 16 Other information

| Revision Date | 01/11/2019 |
|---------------|------------|
| Initial Date | 28/09/2016 |
| | |

SDS Version Summary

| Version | Date of Update | Sections Updated |
|---------|----------------|--|
| 5.1 | 01/11/2019 | One-off system update. NOTE: This may or may not change the GHS classification |

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. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average PC-STEL: Permissible Concentration-Short Term Exposure Limit IARC: International Agency for Research on Cancer ACGIH: American Conference of Governmental Industrial Hygienists STEL: Short Term Exposure Limit TEEL: Temporary Emergency Exposure Limit。 IDLH: Immediately Dangerous to Life or Health Concentrations ES: Exposure Standard 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** AIIC: Australian Inventory of Industrial Chemicals DSL: Domestic Substances List NDSL: Non-Domestic Substances List IECSC: Inventory of Existing Chemical Substance in China EINECS: European INventory of Existing Commercial chemical Substances ELINCS: European List of Notified Chemical Substances NLP: No-Longer Polymers ENCS: Existing and New Chemical Substances Inventory KECI: Korea Existing Chemicals Inventory NZIoC: New Zealand Inventory of Chemicals PICCS: Philippine Inventory of Chemicals and Chemical Substances TSCA: Toxic Substances Control Act TCSI: Taiwan Chemical Substance Inventory INSQ: Inventario Nacional de Sustancias Químicas NCI: National Chemical Inventory

FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

end of SDS