

# **Durasol 362U**

# Chemiplas

Chemwatch: 5063-73 Version No: 8.1

Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

#### Chemwatch Hazard Alert Code: 2

Issue Date: **04/11/2022** Print Date: **07/11/2022** S.GHS.AUS.EN

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

# **Product Identifier**

| Product name                  | Durasol 362U              |
|-------------------------------|---------------------------|
| Chemical Name                 | Not Applicable            |
| Synonyms                      | Acrylic Resin Solutions   |
| Proper shipping name          | RESIN SOLUTION, flammable |
| 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 | Acrylic Resin, solution. Coatings Applications. |
|--------------------------|---|
| Relevant identified uses | Use according to manufacturer's directions.     |

# Details of the manufacturer or supplier of the safety data sheet

| Registered company name | Chemiplas  |
|-------------------------|--|
| Address                 | Level 1, 128 Jolimont Road East Melbourne VIC 3002 Australia |
| Telephone               | +61 3 9419 7300  |
| Fax                     | +61 3 9419 7676  |
| Website                 | www.chemiplas.com.au   |
| Email                   | Not Available  |

# Emergency telephone number

| Association / Organisation        | CHEMWATCH EMERGENCY RESPONSE |
|-----------------------------------|------------------------------|
| Emergency telephone numbers       | +61 1800 951 288             |
| Other emergency telephone numbers | +61 3 9573 3188              |

Once connected and if the message is not in your preferred language then please dial 01

# **SECTION 2 Hazards identification**

# Classification of the substance or mixture

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

# Chemwatch Hazard Ratings

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

| Poisons Schedule   | S6  |
|--------------------|---|
| Classification [1] | Flammable Liquids Category 3, Acute Toxicity (Dermal) Category 4, Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2A, Acute Toxicity (Inhalation) Category 4, Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) Category 3, Hazardous to the Aquatic Environment Acute 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

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| Signal word | Warning |
|-------------|---------|
|             |         |

# Hazard statement(s)

| H226 | Flammable liquid and vapour.       |
|------|------------------------------------|
| H312 | Harmful in contact with skin.      |
| H315 | Causes skin irritation.            |
| H319 | Causes serious eye irritation.     |
| H332 | Harmful if inhaled.                |
| H336 | May cause drowsiness or dizziness. |
| H402 | Harmful to aquatic life.           |

# Precautionary statement(s) Prevention

| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |  |
|------|--|--|
| P271 | Use only a well-ventilated area.   |  |
| P240 | Ground and bond container and receiving equipment.   |  |
| P241 | Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.              |  |

# Precautionary statement(s) Response

| P370+P378      | In case of fire: Use alcohol resistant foam or normal protein foam to extinguish.  |  |
|----------------|--|--|
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |  |
| P312           | Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.  |  |
| P337+P313      | If eye irritation persists: Get medical advice/attention.  |  |

# Precautionary statement(s) Storage

| P403+P235 | Store in a well-ventilated place. Keep cool. |
|-----------|--|
| P405      | Store locked up.                             |

# Precautionary statement(s) Disposal

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**

| III/Atai 00   |   |               |
|---------------|---|---------------|
| CAS No        | %[weight]   | Name          |
| 1330-20-7     | 30-60   | xylene        |
| Not Available | NotSpec   | acrylic resin |
| 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 measur | es  |
|---------------------------------|---|
| 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                      | <ul> <li>If fumes or combustion products are inhaled remove from contaminated area.</li> <li>Lay patient down. Keep warm and rested.</li> <li>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>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.</li> <li>Transport to hospital, or doctor.</li> </ul> |

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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
  - Avoid giving milk or oils.
  - Avoid giving alcohol
  - If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

Last 4 hrs of shift

#### 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.

For acute or short term repeated exposures to xylene:

- Gastro-intestinal absorption is significant with ingestions. For ingestions exceeding 1-2 ml (xylene)/kg, intubation and lavage with cuffed endotracheal tube is recommended. The use of charcoal and cathartics is equivocal.
- ▶ Pulmonary absorption is rapid with about 60-65% retained at rest.
- Primary threat to life from ingestion and/or inhalation, is respiratory failure.
- Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO2 < 50 mm Hg or pCO2 > 50 mm Hg) should be intubated.
- Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.

**BIOLOGICAL EXPOSURE INDEX - BEI** 

These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):

2 mg/min

 Determinant
 Index
 Sampling Time
 Comments

 Methylhippu-ric acids in urine
 1.5 gm/gm creatinine
 End of shift

# **SECTION 5 Firefighting measures**

# Extinguishing media

▶ Foam

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

#### Special hazards arising from the substrate or mixture

Fire Incompatibility Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

# Advice for firefighters

| Fire Fighting         | <ul> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>May be violently or explosively reactive.</li> <li>Wear breathing apparatus plus protective gloves.</li> <li>Prevent, by any means available, spillage from entering drains or water course.</li> </ul>   |
|-----------------------|---|
| Fire/Explosion Hazard | <ul> <li>Liquid and vapour are flammable.</li> <li>Moderate fire hazard when exposed to heat or flame.</li> <li>Vapour forms an explosive mixture with air.</li> <li>Moderate explosion hazard when exposed to heat or flame.</li> <li>Combustion products include:</li> <li>carbon dioxide (CO2)</li> <li>other pyrolysis products typical of burning organic material.</li> </ul> |
| HAZCHEM               | •3Y   |

# **SECTION 6 Accidental release measures**

#### Personal precautions, protective equipment and emergency procedures

See section 8

#### **Environmental precautions**

See section 12

#### Methods and material for containment and cleaning up

| Minor Spills | <ul> <li>Remove all ignition sources.</li> <li>Clean up all spills immediately.</li> <li>Avoid breathing vapours and contact with skin and eyes.</li> <li>Control personal contact with the substance, by using protective equipment.</li> </ul>   |
|--------------|--|
| Major Spills | <ul> <li>Clear area of personnel and move upwind.</li> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>May be violently or explosively reactive.</li> <li>Wear breathing apparatus plus protective gloves.</li> </ul> |

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#### **SECTION 7 Handling and storage**

#### Precautions for safe handling

- ▶ Containers, even those that have been emptied, may contain explosive vapours.
- Do NOT cut, drill, grind, weld or perform similar operations on or near containers.
- ▶ DO NOT allow clothing wet with material to stay in contact with skin
- Safe handling Avoid all personal contact, including inhalation.
  - Wear protective clothing when risk of overexposure occurs
  - ▶ Use in a well-ventilated area
  - Prevent concentration in hollows and sumps.
- Other information

Suitable container

- Store in original containers in approved flammable liquid storage area.
- Store away from incompatible materials in a cool, dry, well-ventilated area.
- ▶ DO NOT store in pits, depressions, basements or areas where vapours may be trapped.
- No smoking, naked lights, heat or ignition sources.

#### Conditions for safe storage, including any incompatibilities

# Packing as supplied by manufacturer.

- Plastic containers may only be used if approved for flammable liquid.
- Check that containers are clearly labelled and free from leaks
- For low viscosity materials (i): Drums and jerry cans must be of the non-removable head type. (ii): Where a can is to be used as an inner package, the can must have a screwed enclosure.
- For materials with a viscosity of at least 2680 cSt. (23 deg. C)
- For manufactured product having a viscosity of at least 250 cSt.

#### Xylenes:

- may ignite or explode in contact with strong oxidisers, 1,3-dichloro-5,5-dimethylhydantoin, uranium fluoride
- attack some plastics, rubber and coatings
- may generate electrostatic charges on flow or agitation due to low conductivity.

#### For alkyl aromatics

The alkyl side chain of aromatic rings can undergo oxidation by several mechanisms. The most common and dominant one is the attack by oxidation at benzylic carbon as the intermediate formed is stabilised by resonance structure of the ring.

#### Storage incompatibility

- Following reaction with oxygen and under the influence of sunlight, a hydroperoxide at the alpha-position to the aromatic ring, is the primary oxidation product formed (provided a hydrogen atom is initially available at this position) this product is often short-lived but may be stable dependent on the nature of the aromatic substitution; a secondary C-H bond is more easily attacked than a primary C-H bond whilst a tertiary C-H bond is even more susceptible to attack by oxygen
- Monoalkylbenzenes may subsequently form monocarboxylic acids; alkyl naphthalenes mainly produce the corresponding naphthalene carboxylic acids.
- Oxidation in the presence of transition metal salts not only accelerates but also selectively decomposes the hydroperoxides.
- Vigorous reactions, sometimes amounting to explosions, can result from the contact between aromatic rings and strong oxidising agents.
- Aromatics can react exothermically with bases and with diazo compounds.

#### **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 | xylene     | Xylene (o-, m-, p- isomers) | 80 ppm / 350 mg/m3 | 655 mg/m3 / 150 ppm | Not Available | Not Available |

# Emergency Limits

| Ingredient | TEEL-1        | TEEL-2        |               | TEEL-3        |
|------------|---------------|---------------|---------------|---------------|
| xylene     | Not Available | Not Available |               | Not Available |
| Ingredient | Original IDLH |               | Revised IDLH  |               |
| xylene     | 900 ppm       |               | Not Available |               |

# Exposure controls

CARE: Use of a quantity of this material in confined space or poorly ventilated area, where rapid build up of concentrated atmosphere may occur, could require increased ventilation and/or protective gear

# Appropriate engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are:

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

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

# Personal protection











#### 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.

# Skin protection

See Hand protection below

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# 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.

#### **Body protection**

Other protection

See Other protection below

- Overalls.
- PVC Apron.
- ▶ PVC protective suit may be required if exposure severe.
- Eyewash unit.
- Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.
- For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets).
- Non sparking safety 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.

#### 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:

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| Material          | СРІ |
|-------------------|-----|
| PE/EVAL/PE        | Α   |
| PVA               | Α   |
| TEFLON            | A   |
| VITON             | Α   |
| BUTYL             | С   |
| BUTYL/NEOPRENE    | С   |
| HYPALON           | С   |
| NAT+NEOPR+NITRILE | С   |
| NATURAL+NEOPRENE  | С   |
| NEOPRENE          | С   |
| NEOPRENE/NATURAL  | С   |
| NITRILE           | С   |
| NITRILE+PVC       | С   |
| PVC               | С   |
| PVDC/PE/PVDC      | С   |

<sup>\*</sup> CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

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

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

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

#### Respiratory protection

Type A 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<br>Protection Factor | Half-Face<br>Respirator | Full-Face<br>Respirator | Powered Air<br>Respirator |
|---------------------------------------|-------------------------|-------------------------|---------------------------|
| up to 10 x ES                         | A-AUS / Class 1         | -                       | A-PAPR-AUS /<br>Class 1   |
| up to 50 x ES                         | Air-line*               | -                       | -                         |
| up to 100 x ES                        | -                       | A-3                     | -                         |
| 100+ x ES                             | -                       | Air-line**              | -                         |

- \* 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)
- 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

# **SECTION 9 Physical and chemical properties**

# Information on basic physical and chemical properties

| Appearance                                   | Clear colourless flammable viscous liquid with an aromatic solvent odour; does not mix with. |   |                           |  |
|--|--|---|---------------------------|--|
| Physical state                               | Liquid   | Relative density (Water = 1)            | 0.98                      |  |
| Odour  | Not Available  | Partition coefficient n-octanol / water | Not Available             |  |
| Odour threshold                              | Not Available  | Auto-ignition temperature (°C)          | Not Available             |  |
| pH (as supplied)                             | Not Applicable   | Decomposition temperature (°C)          | Not Available             |  |
| Melting point / freezing point (°C)          | Not Available  | Viscosity (cSt)                         | 20000-30000 cPs @ 20 degC |  |
| Initial boiling point and boiling range (°C) | 136-145  | Molecular weight (g/mol)                | Not Applicable            |  |
| Flash point (°C)                             | 24   | Taste                                   | Not Available             |  |

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| Evaporation rate          | Not Available     | Explosive properties             | Not Available  |
|---------------------------|-------------------|----------------------------------|----------------|
| Flammability              | Flammable.        | Oxidising properties             | Not Available  |
| Upper Explosive Limit (%) | 7.1               | Surface Tension (dyn/cm or mN/m) | Not Available  |
| Lower Explosive Limit (%) | 1                 | Volatile Component (%vol)        | Not Available  |
| Vapour pressure (kPa)     | 0.8-1.2 @ 20 degC | Gas group                        | Not Available  |
| Solubility in water       | Immiscible        | pH as a solution (1%)            | Not Applicable |
| Vapour density (Air = 1)  | Not Available     | VOC g/L                          | Not Available  |

#### **SECTION 10 Stability and reactivity**

| Reactivity                         | See section 7  |
|------------------------------------|--|
| Chemical stability                 | <ul> <li>Unstable in the presence of incompatible materials.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul> |
| 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

Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.

There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.

Inhalation hazard is increased at higher temperatures.

Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal.

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.

The acute toxicity of inhaled alkylbenzene is best described by central nervous system depression. These compounds may also act as general anaesthetics. Whole body symptoms of poisoning include light-headedness, nervousness, apprehension, a feeling of well-being, confusion, dizziness, drowsiness, ringing in the ears, blurred or double vision, vomiting and sensations of heat, cold or numbness, twitching, tremors, convulsions, unconsciousness, depression of breathing, and arrest. Heart stoppage may result from cardiovascular collapse.

Headache, fatigue, tiredness, irritability and digestive disturbances (nausea, loss of appetite and bloating) are the most common symptoms of xylene overexposure. Injury to the heart, liver, kidneys and nervous system has also been noted amongst workers.

Xylene is a central nervous system depressant

Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful.

Ingestion

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

Not a likely route of entry into the body in commercial or industrial environments. The liquid may produce considerable gastrointestinal discomfort and be harmful or toxic if swallowed.

Skin Contact

Skin contact with the material may be harmful; systemic effects may result following absorption.

The material may cause moderate inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.

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 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.

The liquid produces a high level of eye discomfort and is capable of causing pain and severe conjunctivitis. Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated.

Chronic

There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. There is some evidence from animal testing that exposure to this material may result in toxic effects to the unborn baby

Women exposed to xylene in the first 3 months of pregnancy showed a slightly increased risk of miscarriage and birth defects. Evaluation of workers chronically exposed to xylene has demonstrated lack of genetic toxicity.

Exposure to the material for prolonged periods may cause physical defects in the developing embryo (teratogenesis).

Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS]

| Durasol 362U | TOXICITY  Not Available  | IRRITATION  Not Available  |
|--------------|--|--|
|              | TOXICITY  Dermal (rabbit) LD50: >1700 mg/kg <sup>[2]</sup>                                   | IRRITATION  Eye (human): 200 ppm irritant  |
| xylene       | Inhalation(Rat) LC50: 5000 ppm4h <sup>[2]</sup> Oral (Mouse) LD50; 2119 mg/kg <sup>[2]</sup> | Eye (rabbit): 5 mg/24h SEVERE  Eye (rabbit): 87 mg mild                                    |
|              |  | Eye: adverse effect observed (irritating) <sup>[1]</sup> Skin (rabbit):500 mg/24h moderate |

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| Legend:  | Skin: adverse effect observed (irritating) <sup>[1]</sup> 1. 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 |                          |   |  |
|--|---|--------------------------|---|--|
| Reproductive effector in rats The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. 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. |   |                          |   |  |
| Acute Toxicity   | <b>~</b>  | Carcinogenicity          | × |  |
| Skin Irritation/Corrosion  | ✓   | Reproductivity           | × |  |
| Serious Eye Damage/Irritation  | ✓   | STOT - Single Exposure   | ✓ |  |
| Respiratory or Skin sensitisation  | ×   | STOT - Repeated Exposure | × |  |
| Mutagenicity   | ×   | Aspiration Hazard        | × |  |

Leaend:

★ - Data either not available or does not fill the criteria for classification.

Data available to make classification

# **SECTION 12 Ecological information**

#### Toxicity

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| Durasol 362U | Endpoint Test Duration (hr) |                    | Species  | Value            | Source           |
|--------------|-----------------------------|--------------------|--|------------------|------------------|
|              | Not<br>Available            | Not Available      | Not Available  | Not<br>Available | Not<br>Available |
|              | Endpoint                    | Test Duration (hr) | Species  | Value            | Source           |
| xylene       | EC50                        | 72h                | Algae or other aquatic plants  | 4.6mg/l          | 2                |
|              | EC50                        | 48h                | Crustacea  | 1.8mg/l          | 2                |
|              | NOEC(ECx)                   | 73h                | Algae or other aquatic plants  | 0.44mg/l         | 2                |
|              | LC50                        | 96h                | Fish   | 2.6mg/l          | 2                |
| Legend:      | Ecotox databas              |                    | tered Substances - Ecotoxicological Information<br>dazard Assessment Data 6. NITE (Japan) - Biod |                  |                  |

Harmful to aquatic organisms.

For Aromatic Substances Series:

Environmental Fate: Large, molecularly complex polycyclic aromatic hydrocarbons, or PAHs, are persistent in the environment longer than smaller PAHs.

Atmospheric Fate: PAHs are 'semi-volatile substances" which can move between the atmosphere and the Earth's surface in repeated, temperature-driven cycles of deposition and volatilization. Terrestrial Fate: BTEX compounds have the potential to move through soil and contaminate ground water, and their vapors are highly flammable and explosive. Ecotoxicity - Within an aromatic series, acute toxicity increases with increasing alkyl substitution on the aromatic nucleus. For Xylenes:

 $log\;Koc: 2.05-3.08;\;Koc: 25.4-204;\;Half-life\;(hr)\;air: 0.24-42;\;Half-life\;(hr)\;H2O\;surface\;water: 24-672;\;Half-life\;(hr)\;H2O\;ground: 336-8640;\;Half-life\;(hr)\;soil: 52-672;\;Henry's\;Pa\;m3$ /mol : 637-879; Henry's atm m3 /mol - 7.68E-03; BOD 5 if unstated - 1.4,1%; COD - 2.56,13% ThOD - 3.125 : BCF : 23; log BCF : 1.17-2.41.

Environmental Fate: Most xylenes released to the environment will occur in the atmosphere and volatilisation is the dominant environmental fate process. Soil - Xylenes are expected to have moderate mobility in soil evaporating rapidly from soil surfaces. The extent of the degradation is expected to depend on its concentration, residence time in the soil, the nature of the soil, and whether resident microbial populations have been acclimated.

DO NOT discharge into sewer or waterways

#### Persistence and degradability

| Ingredient | Persistence: Water/Soil     | Persistence: Air            |
|------------|-----------------------------|-----------------------------|
| xylene     | HIGH (Half-life = 360 days) | LOW (Half-life = 1.83 days) |

# **Bioaccumulative potential**

| Ingredient | Bioaccumulation    |
|------------|--------------------|
| xylene     | MEDIUM (BCF = 740) |

# Mobility in soil

| Ingredient | Mobility                              |
|------------|---------------------------------------|
|            | No Data available for all ingredients |

# **SECTION 13 Disposal considerations**

# Waste treatment methods

Product / Packaging disposal

▶ Containers may still present a chemical hazard/ danger when empty.

Return to supplier for reuse/ recycling if possible.

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#### Otherwise:

- If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
- ${}^{\blacktriangleright} \ \ \mbox{Where possible retain label warnings and SDS and observe all notices pertaining to the product.}$

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.

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

# **SECTION 14 Transport information**

#### **Labels Required**



| Marine Pollutant | NO  |
|------------------|-----|
| HAZCHEM          | •3Y |

#### Land transport (ADG)

| zana tranoport (7150)        |   |  |  |
|------------------------------|---|--|--|
| UN number                    | 1866  |  |  |
| UN proper shipping name      | RESIN SOLUTION, flammable                   |  |  |
| Transport hazard class(es)   | Class 3 Subrisk Not Applicable              |  |  |
| Packing group                | III   |  |  |
| Environmental hazard         | Not Applicable                              |  |  |
| Special precautions for user | Special provisions 223 Limited quantity 5 L |  |  |

# Air transport (ICAO-IATA / DGR)

| UN number                    | 1866  |                            |      |  |
|------------------------------|---|----------------------------|------|--|
| UN proper shipping name      | Resin solution flammable                                  | 9                          |      |  |
| T                            | ICAO/IATA Class   | 3                          |      |  |
| Transport hazard class(es)   | ICAO / IATA Subrisk                                       | Not Applicable             |      |  |
|                              | ERG Code  | 3L                         |      |  |
| Packing group                | III   |                            |      |  |
| Environmental hazard         | Not Applicable  |                            |      |  |
|                              | Special provisions  |                            | A3   |  |
|                              | Cargo Only Packing In                                     | 366                        |      |  |
|                              | Cargo Only Maximum  | 220 L                      |      |  |
| Special precautions for user | Passenger and Cargo                                       | 355                        |      |  |
|                              | Passenger and Cargo Maximum Qty / Pack                    |                            |      |  |
|                              | Passenger and Cargo Limited Quantity Packing Instructions |                            |      |  |
|                              | Passenger and Cargo                                       | Limited Maximum Qty / Pack | 10 L |  |

# Sea transport (IMDG-Code / GGVSee)

| UN number                  | 1866                     |                  |  |
|----------------------------|--------------------------|------------------|--|
| UN proper shipping name    | RESIN SOLUTION flammable |                  |  |
| Transport hazard class(es) | IMDG Class IMDG Subrisk  | 3 Not Applicable |  |

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| Packing group                | III                |          |  |
|------------------------------|--------------------|----------|--|
| Environmental hazard         | Not Applicable     |          |  |
|                              | EMS Number         | F-E, S-E |  |
| Special precautions for user | Special provisions | 223 955  |  |
|                              | Limited Quantities | 5 L      |  |

#### 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         |
|--------------|---------------|
| xylene       | Not Available |

# Transport in bulk in accordance with the ICG Code

| Product name | Ship Type     |
|--------------|---------------|
| xylene       | Not Available |

# **SECTION 15 Regulatory information**

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

# xylene is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) Schedule 5

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -

Australian Inventory of Industrial Chemicals (AIIC)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

#### **National Inventory Status**

Schedule 6

| National Inventory                                 | Status   |
|--|--|
| Australia - AIIC / Australia<br>Non-Industrial Use | Yes  |
| Canada - DSL                                       | Yes  |
| Canada - NDSL                                      | No (xylene)  |
| 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 | 04/11/2022 |
|---------------|------------|
| Initial Date  | 29/12/2004 |

# **SDS Version Summary**

| Version | Date of Update | Sections Updated   |
|---------|----------------|--|
| 7.1     | 01/11/2019     | One-off system update. NOTE: This may or may not change the GHS classification |
| 8.1     | 04/11/2022     | Physical Properties, Supplier Information, Use                                 |

# 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**

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 ${\tt PC-STEL: Permissible \ Concentration-Short \ Term \ Exposure \ Limit}$ 

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

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