



## Clear Protective Lacquer Pen #251-3615

RS Components Pty Ltd

Chemwatch: 5167-28

Version No: 5.1.1.1

Safety Data Sheet according to WHS and ADG requirements

Chemwatch Hazard Alert Code: 3

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

#### Product Identifier

|                               |  |
|-------------------------------|--|
| Product name                  | Clear Protective Lacquer Pen #251-3615   |
| Synonyms                      | Not Available  |
| Proper shipping name          | PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound) |
| Other means of identification | Not Available  |

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

|                          |                       |
|--------------------------|-----------------------|
| Relevant identified uses | Appliance protection. |
|--------------------------|-----------------------|

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

|                         |                                     |
|-------------------------|-------------------------------------|
| Registered company name | RS Components Pty Ltd               |
| Address                 | 25 Pavesi Street NSW 2164 Australia |
| Telephone               | 1300 656 636                        |
| Fax                     | 1300 656 696                        |
| Website                 | Not Available                       |
| Email                   | Not Available                       |

#### Emergency telephone number

|                                   |               |
|-----------------------------------|---------------|
| Association / Organisation        | Not Available |
| Emergency telephone numbers       | 1800 039 008  |
| Other emergency telephone numbers | 03 95733112   |

### 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 | 3   | 4   |
| Toxicity     | 2   | 3   |
| Body Contact | 2   | 3   |
| Reactivity   | 1   | 2   |
| Chronic      | 0   | 1   |

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

|                               |   |
|-------------------------------|---|
| Poisons Schedule              | S6  |
| Classification <sup>[1]</sup> | Flammable Liquid Category 2, Acute Toxicity (Oral) Category 4, Acute Toxicity (Dermal) Category 4, Acute Toxicity (Inhalation) Category 4, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Specific target organ toxicity - single exposure Category 3 (respiratory tract irritation), Specific target organ toxicity - single exposure Category 3 (narcotic effects) |
| Legend:                       | 1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI  |

#### Label elements

Continued...

## Clear Protective Lacquer Pen #251-3615

Hazard pictogram(s)



SIGNAL WORD

DANGER

## Hazard statement(s)

|      |                                     |
|------|-------------------------------------|
| H225 | Highly flammable liquid and vapour. |
| H302 | Harmful if swallowed.               |
| H312 | Harmful in contact with skin.       |
| H332 | Harmful if inhaled.                 |
| H315 | Causes skin irritation.             |
| H319 | Causes serious eye irritation.      |
| H335 | May cause respiratory irritation.   |
| H336 | May cause drowsiness or dizziness.  |

## Precautionary statement(s) Prevention

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

## Precautionary statement(s) Response

|                |  |
|----------------|--|
| P362           | Take off contaminated clothing and wash before reuse.  |
| P370+P378      | In case of fire: Use alcohol resistant foam or normal protein foam for extinction.   |
| 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

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

## Precautionary statement(s) Disposal

|      |   |
|------|---|
| P501 | Dispose of contents/container in accordance with local regulations. |
|------|---|

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

## Substances

See section below for composition of Mixtures

## Mixtures

| CAS No    | %[weight] | Name        |
|-----------|-----------|-------------|
| 67-63-0   | 60-80     | isopropanol |
| 1330-20-7 | 10-30     | xylene      |

## SECTION 4 FIRST AID MEASURES

## Description of first aid measures

|              |  |
|--------------|--|
| Eye Contact  | <p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> <li>▶ Immediately hold eyelids apart and flush the eye continuously with running water.</li> <li>▶ 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.</li> <li>▶ Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.</li> <li>▶ Transport to hospital or doctor without delay.</li> <li>▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul> |
| Skin Contact | <p>If skin contact occurs:</p> <ul style="list-style-type: none"> <li>▶ Immediately remove all contaminated clothing, including footwear.</li> <li>▶ Flush skin and hair with running water (and soap if available).</li> <li>▶ Seek medical attention in event of irritation.</li> </ul>  |
| Inhalation   | <ul style="list-style-type: none"> <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, without delay.</li> </ul>   |

Continued...

## Clear Protective Lacquer Pen #251-3615

## 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.

## Indication of any immediate medical attention and special treatment needed

For acute or short term repeated exposures to isopropanol:

- ▶ Rapid onset respiratory depression and hypotension indicates serious ingestions that require careful cardiac and respiratory monitoring together with immediate intravenous access.
- ▶ Rapid absorption precludes the usefulness of emesis or lavage 2 hours post-ingestion. Activated charcoal and cathartics are not clinically useful. Ipecac is most useful when given 30 mins. post-ingestion.
- ▶ There are no antidotes.
- ▶ Management is supportive. Treat hypotension with fluids followed by vasopressors.
- ▶ Watch closely, within the first few hours for respiratory depression; follow arterial blood gases and tidal volumes.
- ▶ Ice water lavage and serial haemoglobin levels are indicated for those patients with evidence of gastrointestinal bleeding.

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 (pO<sub>2</sub> < 50 mm Hg or pCO<sub>2</sub> > 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):

| Determinant                    | Index                | Sampling Time       | Comments |
|--------------------------------|----------------------|---------------------|----------|
| Methylhippu-ric acids in urine | 1.5 gm/gm creatinine | End of shift        |          |
|                                | 2 mg/min             | Last 4 hrs of shift |          |
| Treat symptomatically.         |                      |                     |          |

## SECTION 5 FIREFIGHTING MEASURES

## Extinguishing media

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

Do not use a water jet to fight fire.

## Special hazards arising from the substrate or mixture

## Fire Incompatibility

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

## Advice for firefighters

## Fire Fighting

- ▶ Alert Fire Brigade and tell them location and nature of hazard.
- ▶ May be violently or explosively reactive.
- ▶ Wear breathing apparatus plus protective gloves in the event of a fire.
- ▶ Prevent, by any means available, spillage from entering drains or water course.

## Fire/Explosion Hazard

- ▶ Liquid and vapour are highly flammable.
  - ▶ Severe fire hazard when exposed to heat, flame and/or oxidisers.
  - ▶ Vapour may travel a considerable distance to source of ignition.
  - ▶ Heating may cause expansion or decomposition leading to violent rupture of containers.
- Combustion products include:
- carbon dioxide (CO<sub>2</sub>)
  - 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

•3YE

## 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

- ▶ 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.

Continued...

## Clear Protective Lacquer Pen #251-3615

## Major Spills

- ▶ Clear area of personnel and move upwind.
- ▶ Alert Fire Brigade and tell them location and nature of hazard.
- ▶ May be violently or explosively reactive.
- ▶ Wear breathing apparatus plus protective gloves.

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

## SECTION 7 HANDLING AND STORAGE

## Precautions for safe handling

|                   |   |
|-------------------|---|
| Safe handling     | <ul style="list-style-type: none"> <li>▶ Containers, even those that have been emptied, may contain explosive vapours.</li> <li>▶ Do NOT cut, drill, grind, weld or perform similar operations on or near containers.</li> <li>▶ <b>DO NOT allow clothing wet with material to stay in contact with skin</b></li> <li>▶ Electrostatic discharge may be generated during pumping - this may result in fire.</li> <li>▶ Ensure electrical continuity by bonding and grounding (earthing) all equipment.</li> <li>▶ Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<math>\leq 1</math> m/sec until fill pipe submerged to twice its diameter, then <math>\leq 7</math> m/sec).</li> <li>▶ Avoid splash filling.</li> <li>▶ Avoid all personal contact, including inhalation.</li> <li>▶ Wear protective clothing when risk of exposure occurs.</li> <li>▶ Use in a well-ventilated area.</li> <li>▶ Prevent concentration in hollows and sumps.</li> </ul> |
| Other information | <ul style="list-style-type: none"> <li>▶ Store in original containers in approved flame-proof area.</li> <li>▶ No smoking, naked lights, heat or ignition sources.</li> <li>▶ <b>DO NOT store in pits, depressions, basements or areas where vapours may be trapped.</b></li> <li>▶ Keep containers securely sealed.</li> </ul>   |

## Conditions for safe storage, including any incompatibilities

|                         |   |
|-------------------------|---|
| Suitable container      | <ul style="list-style-type: none"> <li>▶ <b>DO NOT use aluminium or galvanised containers</b></li> <li>▶ Packing as supplied by manufacturer.</li> <li>▶ Plastic containers may only be used if approved for flammable liquid.</li> <li>▶ Check that containers are clearly labelled and free from leaks.</li> <li>▶ 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.</li> <li>▶ For materials with a viscosity of at least 2680 cSt. (23 deg. C)</li> <li>▶ For manufactured product having a viscosity of at least 250 cSt.</li> </ul> |
| Storage incompatibility | <ul style="list-style-type: none"> <li>▶ Avoid storage with reducing agents.</li> <li>▶ Avoid strong acids, bases.</li> <li>▶ Avoid reaction with oxidising agents</li> </ul>   |

## 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 | 983 mg/m <sup>3</sup> / 400 ppm | 1230 mg/m <sup>3</sup> / 500 ppm | Not Available | Not Available |


## EMERGENCY LIMITS

| Ingredient  | Material name     | TEEL-1        | TEEL-2        | TEEL-3        |
|-------------|-------------------|---------------|---------------|---------------|
| isopropanol | Isopropyl alcohol | 400 ppm       | 2000 ppm      | 12000 ppm     |
| xylene      | Xylenes           | Not Available | Not Available | Not Available |

| Ingredient  | Original IDLH | Revised IDLH    |
|-------------|---------------|-----------------|
| isopropanol | 12,000 ppm    | 2,000 [LEL] ppm |
| xylene      | 1,000 ppm     | 900 ppm         |

## MATERIAL DATA

## Exposure controls

|                                  |  |
|----------------------------------|--|
| Appropriate engineering controls | <p>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.</p> <p>The basic types of engineering controls are:</p> <p>Process controls which involve changing the way a job activity or process is done to reduce the risk.</p> <p>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.</p> |
| Personal protection              |   |
| Eye and face protection          | <ul style="list-style-type: none"> <li>▶ Safety glasses with side shields.</li> <li>▶ Chemical goggles.</li> <li>▶ 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.</li> </ul>  |

## Clear Protective Lacquer Pen #251-3615

|                              |   |
|------------------------------|---|
| <b>Skin protection</b>       | See Hand protection below   |
| <b>Hands/feet protection</b> | <ul style="list-style-type: none"> <li>Wear chemical protective gloves, e.g. PVC.</li> <li>Wear safety footwear or safety gumboots, e.g. Rubber</li> </ul> <p>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.</p> <p>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.</p> <p>Personal hygiene is a key element of effective hand care.</p>   |
| <b>Body protection</b>       | See Other protection below  |
| <b>Other protection</b>      | <ul style="list-style-type: none"> <li>Overalls.</li> <li>PVC Apron.</li> <li>PVC protective suit may be required if exposure severe.</li> <li>Eyewash unit.</li> <li>Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.</li> <li>For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets).</li> <li>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 and shall dissipate static electricity from the body to reduce the possibility of ignition of volatile compounds.</li> </ul> |
| <b>Thermal hazards</b>       | Not Available   |

## 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:

Clear Protective Lacquer Pen #251-3615

| Material          | CPI |
|-------------------|-----|
| PE/EVAL/PE        | A   |
| BUTYL             | C   |
| BUTYL/NEOPRENE    | C   |
| HYALON            | C   |
| NAT+NEOPR+NITRILE | C   |
| NATURAL RUBBER    | C   |
| NATURAL+NEOPRENE  | C   |
| NEOPRENE          | C   |
| NEOPRENE/NATURAL  | C   |
| NITRILE           | C   |
| NITRILE+PVC       | C   |
| PVA               | C   |
| PVC               | C   |
| PVDC/PE/PVDC      | C   |
| TEFLON            | C   |
| VITON             | C   |

\* 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 Protection Factor | Half-Face Respirator | Full-Face Respirator | Powered Air Respirator |
|------------------------------------|----------------------|----------------------|------------------------|
| up to 10 x ES                      | A-AUS                | -                    | A-PAPR-AUS / Class 1   |
| up to 50 x ES                      | -                    | A-AUS / Class 1      | -                      |
| up to 100 x ES                     | -                    | A-2                  | A-PAPR-2 ^             |

^ - 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)

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

## Information on basic physical and chemical properties

|  |  |  |                  |
|--|--|--|------------------|
| <b>Appearance</b>                          | Clear amber highly flammable liquid with a solvent odour; does not mix with water. |  |                  |
| <b>Physical state</b>                      | Liquid   | <b>Relative density (Water = 1)</b>            | 0.86-0.87 @ 20 C |
| <b>Odour</b>                               | Not Available  | <b>Partition coefficient n-octanol / water</b> | Not Available    |
| <b>Odour threshold</b>                     | Not Available  | <b>Auto-ignition temperature (°C)</b>          | >425             |
| <b>pH (as supplied)</b>                    | Not Applicable   | <b>Decomposition temperature</b>               | Not Available    |
| <b>Melting point / freezing point (°C)</b> | Not Available  | <b>Viscosity (cSt)</b>                         | 25 @ 20 C        |

Continued...

## Clear Protective Lacquer Pen #251-3615

|  |                   |                                  |                |
|--|-------------------|----------------------------------|----------------|
| Initial boiling point and boiling range (°C) | Not Available     | Molecular weight (g/mol)         | Not Applicable |
| Flash point (°C)                             | 12 (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)        | Not Available  |
| Vapour pressure (kPa)                        | 4.4 @ 30 C        | Gas group                        | Not Available  |
| Solubility in water (g/L)                    | 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 style="list-style-type: none"> <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

|              |  |
|--------------|--|
| Inhaled      | <p>Evidence shows, or practical experience predicts, that the material produces irritation of the respiratory system, in a substantial number of individuals, following inhalation. In contrast to most organs, the lung is able to respond to a chemical insult by first removing or neutralising the irritant and then repairing the damage. The repair process, which initially evolved to protect mammalian lungs from foreign matter and antigens, may however, produce further lung damage resulting in the impairment of gas exchange, the primary function of the lungs. Respiratory tract irritation often results in an inflammatory response involving the recruitment and activation of many cell types, mainly derived from the vascular system.</p> <p>Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo.</p> <p>Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful.</p>  |
| Ingestion    | Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.  |
| Skin Contact | <p>Skin contact with the material may be harmful; systemic effects may result following absorption.</p> <p>Open cuts, abraded or irritated skin should not be exposed to this material</p> <p>Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.</p>  |
| Eye          | <p>Evidence exists, or practical experience predicts, that the material may cause severe eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals. Eye contact may cause significant inflammation with pain. Corneal injury may occur; permanent impairment of vision may result unless treatment is prompt and adequate. Repeated or prolonged exposure to irritants may cause inflammation characterised by a temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration may occur.</p> <p>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.</p>  |
| Chronic      | <p>Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems. Prolonged or repeated contact with xylenes may cause defatting dermatitis with drying and cracking. Chronic inhalation of xylenes has been associated with central nervous system effects, loss of appetite, nausea, ringing in the ears, irritability, thirst anaemia, mucosal bleeding, enlarged liver and hyperplasia. Exposure may produce kidney and liver damage. In chronic occupational exposure, xylene (usually mixed with other solvents) has produced irreversible damage to the central nervous system and ototoxicity (damages hearing and increases sensitivity to noise), probably due to neurotoxic mechanisms. Long term or repeated ingestion exposure of isopropanol may produce incoordination, lethargy and reduced weight gain.</p> <p>Repeated inhalation exposure to isopropanol may produce narcosis, incoordination and liver degeneration. Animal data show developmental effects only at exposure levels that produce toxic effects in the adult animals. Isopropanol does not cause genetic damage in bacterial or mammalian cell cultures or in animals.</p> <p>Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS]</p> <p>Prolonged or continuous skin contact with the liquid may cause defatting with drying, cracking, irritation and dermatitis following.</p> |

|  |   |                                   |
|--|---|-----------------------------------|
| Clear Protective Lacquer Pen #251-3615 | TOXICITY  | IRRITATION                        |
|  | Not Available                                       | Not Available                     |
| isopropanol                            | TOXICITY  | IRRITATION                        |
|  | Dermal (rabbit) LD50: 12800 mg/kg <sup>[2]</sup>    | Eye (rabbit): 10 mg - moderate    |
|  | Inhalation (rat) LC50: 32000 ppm/8hr <sup>[2]</sup> | Eye (rabbit): 100 mg - SEVERE     |
|  | Oral (rat) LD50: 5000 mg/kg <sup>[2]</sup>          | Eye (rabbit): 100mg/24hr-moderate |
|  |   | Skin (rabbit): 500 mg - mild      |

## Clear Protective Lacquer Pen #251-3615

| xylene | TOXICITY   | IRRITATION                         |
|--------|--|------------------------------------|
|        | Dermal (rabbit) LD50: >1700 mg/kg <sup>[2]</sup>   | Eye (human): 200 ppm irritant      |
|        | Inhalation (rat) LC50: 5000 ppm/4hr <sup>[2]</sup> | Eye (rabbit): 5 mg/24h SEVERE      |
|        | Oral (rat) LD50: 4300 mg/kg <sup>[2]</sup>         | Eye (rabbit): 87 mg mild           |
|        |  | Skin (rabbit): 500 mg/24h moderate |

**Legend:** 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

|                                 |  |
|---------------------------------|--|
| <b>ISOPROPANOL</b>              | For isopropanol (IPA):<br><b>Acute toxicity:</b> Isopropanol has a low order of acute toxicity. It is irritating to the eyes, but not to the skin. Very high vapor concentrations are irritating to the eyes, nose, and throat, and prolonged exposure may produce central nervous system depression and narcosis. Human volunteers reported that exposure to 400 ppm isopropanol vapors for 3 to 5 min.<br>The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis. |
| <b>XYLENE</b>                   | The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.<br>The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling the epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis.<br>Reproductive effector in rats  |
| <b>ISOPROPANOL &amp; XYLENE</b> | The substance is classified by IARC as Group 3:<br><b>NOT</b> classifiable as to its carcinogenicity to humans.<br>Evidence of carcinogenicity may be inadequate or limited in animal testing.   |

|  |   |                                 |   |
|--|---|---------------------------------|---|
| <b>Acute Toxicity</b>                    | ✓ | <b>Carcinogenicity</b>          | ⊘ |
| <b>Skin Irritation/Corrosion</b>         | ✓ | <b>Reproductivity</b>           | ⊘ |
| <b>Serious Eye Damage/Irritation</b>     | ✓ | <b>STOT - Single Exposure</b>   | ✓ |
| <b>Respiratory or Skin sensitisation</b> | ⊘ | <b>STOT - Repeated Exposure</b> | ⊘ |
| <b>Mutagenicity</b>                      | ⊘ | <b>Aspiration Hazard</b>        | ⊘ |

**Legend:** ✗ – Data available but does not fill the criteria for classification  
 ✓ – Data available to make classification  
 ⊘ – Data Not Available to make classification

## SECTION 12 ECOLOGICAL INFORMATION

## Toxicity

| Clear Protective Lacquer Pen #251-3615 | ENDPOINT       | TEST DURATION (HR) | SPECIES                       | VALUE          | SOURCE         |
|--|----------------|--------------------|-------------------------------|----------------|----------------|
|  | Not Applicable | Not Applicable     | Not Applicable                | Not Applicable | Not Applicable |
| isopropanol                            | ENDPOINT       | TEST DURATION (HR) | SPECIES                       | VALUE          | SOURCE         |
|  | LC50           | 96                 | Fish                          | 183.844mg/L    | 3              |
|  | EC50           | 48                 | Crustacea                     | 12500mg/L      | 5              |
|  | EC50           | 96                 | Algae or other aquatic plants | 993.232mg/L    | 3              |
|  | EC50           | 384                | Crustacea                     | 42.389mg/L     | 3              |
|  | NOEC           | 5760               | Fish                          | 0.02mg/L       | 4              |
| xylene                                 | ENDPOINT       | TEST DURATION (HR) | SPECIES                       | VALUE          | SOURCE         |
|  | LC50           | 96                 | Fish                          | 2.6mg/L        | 2              |
|  | EC50           | 48                 | Crustacea                     | >3.4mg/L       | 2              |
|  | EC50           | 72                 | Algae or other aquatic plants | 4.6mg/L        | 2              |
|  | EC50           | 24                 | Crustacea                     | 0.711mg/L      | 4              |
|  | NOEC           | 73                 | Algae or other aquatic plants | 0.44mg/L       | 2              |

**Legend:** Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

**DO NOT** discharge into sewer or waterways.

## Persistence and degradability

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

Continued...

## Clear Protective Lacquer Pen #251-3615

|        |                             |                             |
|--------|-----------------------------|-----------------------------|
| xylene | HIGH (Half-life = 360 days) | LOW (Half-life = 1.83 days) |
|--------|-----------------------------|-----------------------------|

## Bioaccumulative potential

| Ingredient  | Bioaccumulation     |
|-------------|---------------------|
| isopropanol | LOW (LogKOW = 0.05) |
| xylene      | MEDIUM (BCF = 740)  |

## Mobility in soil

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

## SECTION 13 DISPOSAL CONSIDERATIONS

## Waste treatment methods

|                              |   |
|------------------------------|---|
| Product / Packaging disposal | <ul style="list-style-type: none"> <li>Containers may still present a chemical hazard/ danger when empty.</li> <li>Return to supplier for reuse/ recycling if possible.</li> <li>Otherwise: <ul style="list-style-type: none"> <li>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.</li> <li>Where possible retain label warnings and SDS and observe all notices pertaining to the product.</li> <li><b>DO NOT allow wash water from cleaning or process equipment to enter drains.</b></li> <li>It may be necessary to collect all wash water for treatment before disposal.</li> <li>In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.</li> <li>Where in doubt contact the responsible authority.</li> <li>Recycle wherever possible.</li> <li>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.</li> <li>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).</li> <li>Decontaminate empty containers.</li> </ul> </li> </ul> |
|------------------------------|---|

## SECTION 14 TRANSPORT INFORMATION

## Labels Required

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

## Land transport (ADG)

|                              |  |                    |         |                  |                |
|------------------------------|--|--------------------|---------|------------------|----------------|
| UN number                    | 1263   |                    |         |                  |                |
| UN proper shipping name      | PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound) |                    |         |                  |                |
| Transport hazard class(es)   | <table> <tr> <td>Class</td><td>3</td></tr> <tr> <td>Subrisk</td><td>Not Applicable</td></tr> </table>  | Class              | 3       | Subrisk          | Not Applicable |
| Class                        | 3  |                    |         |                  |                |
| Subrisk                      | Not Applicable   |                    |         |                  |                |
| Packing group                | II   |                    |         |                  |                |
| Environmental hazard         | Not Applicable   |                    |         |                  |                |
| Special precautions for user | <table> <tr> <td>Special provisions</td><td>163 367</td></tr> <tr> <td>Limited quantity</td><td>5 L</td></tr> </table>   | Special provisions | 163 367 | Limited quantity | 5 L            |
| Special provisions           | 163 367  |                    |         |                  |                |
| Limited quantity             | 5 L  |                    |         |                  |                |

## Air transport (ICAO-IATA / DGR)

|                                 |   |                    |             |                                 |                |          |    |
|---------------------------------|---|--------------------|-------------|---------------------------------|----------------|----------|----|
| UN number                       | 1263  |                    |             |                                 |                |          |    |
| UN proper shipping name         | Paint (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base); Paint related material (including paint thinning or reducing compounds) |                    |             |                                 |                |          |    |
| Transport hazard class(es)      | <table> <tr> <td>ICAO/IATA Class</td><td>3</td></tr> <tr> <td>ICAO / IATA Subrisk</td><td>Not Applicable</td></tr> <tr> <td>ERG Code</td><td>3L</td></tr> </table>                        | ICAO/IATA Class    | 3           | ICAO / IATA Subrisk             | Not Applicable | ERG Code | 3L |
| ICAO/IATA Class                 | 3   |                    |             |                                 |                |          |    |
| ICAO / IATA Subrisk             | Not Applicable  |                    |             |                                 |                |          |    |
| ERG Code                        | 3L  |                    |             |                                 |                |          |    |
| Packing group                   | II  |                    |             |                                 |                |          |    |
| Environmental hazard            | Not Applicable  |                    |             |                                 |                |          |    |
| Special precautions for user    | <table> <tr> <td>Special provisions</td><td>A3 A72 A192</td></tr> <tr> <td>Cargo Only Packing Instructions</td><td>364</td></tr> </table>   | Special provisions | A3 A72 A192 | Cargo Only Packing Instructions | 364            |          |    |
| Special provisions              | A3 A72 A192   |                    |             |                                 |                |          |    |
| Cargo Only Packing Instructions | 364   |                    |             |                                 |                |          |    |



## Clear Protective Lacquer Pen #251-3615

|   |      |
|---|------|
| Cargo Only Maximum Qty / Pack                             | 60 L |
| Passenger and Cargo Packing Instructions                  | 353  |
| Passenger and Cargo Maximum Qty / Pack                    | 5 L  |
| Passenger and Cargo Limited Quantity Packing Instructions | Y341 |
| Passenger and Cargo Limited Maximum Qty / Pack            | 1 L  |

## Sea transport (IMDG-Code / GGVSee)

|                              |  |
|------------------------------|--|
| UN number                    | 1263   |
| UN proper shipping name      | PAINT (including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound) |
| Transport hazard class(es)   | IMDG Class : 3<br>IMDG Subrisk : Not Applicable  |
| Packing group                | II   |
| Environmental hazard         | Not Applicable   |
| Special precautions for user | EMS Number : F-E, S-E<br>Special provisions : 163 367<br>Limited Quantities : 5 L  |

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

Not Applicable

## SECTION 15 REGULATORY INFORMATION

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

## ISOPROPANOL(67-63-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS

|  |   |
|--|---|
| Australia Exposure Standards   | Australia Inventory of Chemical Substances (AICS)   |
| Australia Hazardous Substances Information System - Consolidated Lists | International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs |

## XYLENE(1330-20-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS

|  |   |
|--|---|
| Australia Exposure Standards   | Australia Inventory of Chemical Substances (AICS)   |
| Australia Hazardous Substances Information System - Consolidated Lists | International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs |

| National Inventory            | Status   |
|-------------------------------|--|
| Australia - AICS              | Y  |
| Canada - DSL                  | Y  |
| Canada - NDSL                 | N (xylene; isopropanol)  |
| China - IECSC                 | Y  |
| Europe - EINEC / ELINCS / NLP | Y  |
| Japan - ENCS                  | N (xylene; isopropanol)  |
| Korea - KECI                  | Y  |
| New Zealand - NZIoC           | Y  |
| Philippines - PICCS           | Y  |
| USA - TSCA                    | Y  |
| Legend:                       | Y = All ingredients are on the inventory<br>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

## 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

Continued...

**Clear Protective Lacquer Pen #251-3615**

OSF: Odour Safety Factor

NOAEL: No Observed Adverse Effect Level

LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value

LOD: Limit Of Detection

OTV: Odour Threshold Value

BCF: BioConcentration Factors

BEI: Biological Exposure Index

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