## Altex Thinning Solvent \#20

## Altex Coatings Ltd

Version No: 3.6

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

Product Identifier

| Product name | Altex Thinning Solvent \#20 |
| ---: | :--- |
| 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 <br> (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 Thinning Solvent

Details of the manufacturer or supplier of the safety data sheet

| Registered company name | Altex Coatings Ltd |
| ---: | :--- |
| Address | $91-111$ Oropi Road Tauranga 3112 New Zealand |
| Telephone | +6475411221 |
| Fax | +6475411310 |
| Website | $\underline{\text { www.altexcoatings.com }}$ |
| Email | neil.debenham@carboline.co.nz |

## Emergency telephone number

| Association / Organisation | NZ POISONS (24hr 7 days) | CHEMWATCH EMERGENCY RESPONSE |
| :---: | :---: | :---: |
| Emergency telephone numbers | 0800764766 | +64800 700112 |
| Other emergency telephone numbers | Not Available | +6139573 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

Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Classified as Dangerous Goods for transport purposes.

| Classification ${ }^{[1]}$ | Specific Target Organ Toxicity - Repeated Exposure Category 2, Flammable Liquids Category 2, Serious Eye Damage/Eye Irritation Category 2, <br> Reproductive Toxicity Category 2, Hazardous to the Aquatic Environment Long-Term Hazard Category 3 |
| ---: | :--- |
| Legend: | 1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008-Annex VI |

## Label elements

| Hazard pictogram(s) |  |  |  |  |
| ---: | :--- | :---: | :---: | :---: |
| Signal word | Danger |  |  |  |
| Hazard statement(s) |  |  |  |  |
|  | H373 |  |  |  |
| H225 | Hay cause damage to organs through prolonged or repeated exposure. |  |  |  |
| H319 | Causes serious eye irritation. |  |  |  |
| H361 | Suspected of damaging fertility or the unborn child. |  |  |  |
| H412 | Harmful to aquatic life with long lasting effects. |  |  |  |

## Precautionary statement(s) Prevention

|  | $\mathbf{P 2 1 0}$ | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| :--- | :--- | :--- |
|  | $\mathbf{P 2 3 3}$ | Keep container tightly closed. |
| $\mathbf{P 2 6 0}$ | Do not breathe mist/vapours/spray. |  |
|  | $\mathbf{P 2 8 0}$ | Wear protective gloves, protective clothing, eye protection and face protection. |
| $\mathbf{P 2 4 0}$ | Ground and bond container and receiving equipment. |  |
| $\mathbf{P 2 4 1}$ | Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment. |  |
| $\mathbf{P 2 4 2}$ | Use non-sparking tools. |  |
|  | $\mathbf{P 2 4 3}$ | Take action to prevent static discharges. |
|  | Avoid release to the environment. |  |
|  | Wash all exposed external body areas thoroughly after handling. |  |

## Precautionary statement(s) Response

| $\mathbf{P 3 0 8 + P 3 1 3}$ | IF exposed or concerned: Get medical advice/ attention. |
| ---: | :--- |
| $\mathbf{P 3 7 0 + P 3 7 8}$ | In case of fire: Use alcohol resistant foam or normal protein foam to extinguish. |
| $\mathbf{P 3 0 5 + P 3 5 1 + P 3 3 8}$ | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| $\mathbf{P 3 1 4}$ | Get medical advice/attention if you feel unwell. |
| $\mathbf{P 3 3 7 + P 3 1 3}$ | If eye irritation persists: Get medical advice/attention. |
| $\mathbf{P 3 0 3 + P 3 6 1 + P 3 5 3}$ | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. |

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 to authorised hazardous or special waste collection point in accordance with any local regulation.

## SECTION 3 Composition / information on ingredients

## Substances

See section below for composition of Mixtures

## Mixtures

| CAS No |  | \%[weight] | Name |
| :---: | :---: | :---: | :---: |
| 108-65-6 |  | 50-60 | propylene glycol monomethyl ether acetate.alpha-isomer |
| 141-78-6 |  | 30-40 | ethyl acetate |
| 108-88-3 |  | 1-10 | toluene |
|  | Legend: | 1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008-Annex VI; <br> 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: <br> - Wash out immediately with fresh running water. <br> - Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. <br> - Seek medical attention without delay; if pain persists or recurs seek medical attention. <br> - Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. |
| :---: | :---: |
| Skin Contact | If skin or hair contact occurs: <br> - Flush skin and hair with running water (and soap if available). <br> - Seek medical attention in event of irritation. |
| Inhalation | - If fumes or combustion products are inhaled remove from contaminated area. <br> - Lay patient down. Keep warm and rested. <br> - Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. <br> - Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. <br> - Transport to hospital, or doctor, without delay. |
| Ingestion | - If swallowed do NOT induce vomiting. <br> - If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. <br> - Observe the patient carefully. <br> - Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. <br> - Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. <br> - Seek medical advice. <br> - Avoid giving milk or oils. <br> - Avoid giving alcohol. <br> - If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus. |

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

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

## SECTION 5 Firefighting measures

## Extinguishing media

- Alcohol stable foam.

Dry chemical powder
BCF (where regulations permit).

- Carbon dioxide.
-Water spray or fog - Large fires only.


## Special hazards arising from the substrate or mixture

Fire Incompatibility

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


## Advice for firefighters

| Fire Fighting | - Alert Fire Brigade and tell them location and nature of hazard. <br> - May be violently or explosively reactive. <br> - Wear breathing apparatus plus protective gloves in the event of a fire. <br> - Prevent, by any means available, spillage from entering drains or water course. <br> - Consider evacuation (or protect in place). <br> - Fight fire from a safe distance, with adequate cover. <br> - If safe, switch off electrical equipment until vapour fire hazard removed. <br> - Use water delivered as a fine spray to control the fire and cool adjacent area. <br> - Avoid spraying water onto liquid pools. <br> - Do not approach containers suspected to be hot. <br> - Cool fire exposed containers with water spray from a protected location. <br> - If safe to do so, remove containers from path of fire. |
| :---: | :---: |
| Fire/Explosion Hazard | - Liquid and vapour are highly flammable. <br> - Severe fire hazard when exposed to heat, flame and/or oxidisers. <br> - Vapour may travel a considerable distance to source of ignition. <br> - Heating may cause expansion or decomposition leading to violent rupture of containers. <br> - On combustion, may emit toxic fumes of carbon monoxide (CO). <br> Combustion products include: <br> carbon dioxide (CO2) <br> other pyrolysis products typical of burning organic material. <br> Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions. |

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

## SECTION 7 Handling and storage

| Precautions for safe handling |  |
| :---: | :---: |
| Safe handling | The conductivity of this material may make it a static accumulator., A liquid is typically considered nonconductive if its conductivity is below 100 $\mathrm{pS} / \mathrm{m}$ and is considered semi-conductive if its conductivity is below $10000 \mathrm{pS} / \mathrm{m}$., Whether a liquid is nonconductive or semi-conductive, the precautions are the same., A number of factors, for example liquid temperature, presence of contaminants, and anti-static additives can greatly influence the conductivity of a liquid. <br> Even with proper grounding and bonding, this material can still accumulate an electrostatic charge. If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable air-vapour mixtures can occur. <br> - Containers, even those that have been emptied, may contain explosive vapours. <br> - Do NOT cut, drill, grind, weld or perform similar operations on or near containers. <br> - Avoid all personal contact, including inhalation. <br> - Wear protective clothing when risk of exposure occurs. <br> - Use in a well-ventilated area. <br> - Prevent concentration in hollows and sumps. <br> - DO NOT enter confined spaces until atmosphere has been checked. <br> - Avoid smoking, naked lights, heat or ignition sources. <br> - When handling, DO NOT eat, drink or smoke. <br> - Vapour may ignite on pumping or pouring due to static electricity. <br> - DO NOT use plastic buckets. <br> - Earth and secure metal containers when dispensing or pouring product. <br> - Use spark-free tools when handling. <br> - Avoid contact with incompatible materials. <br> - Keep containers securely sealed. <br> - Avoid physical damage to containers. <br> - Always wash hands with soap and water after handling. <br> - Work clothes should be laundered separately. <br> - Use good occupational work practice. <br> - Observe manufacturer's storage and handling recommendations contained within this SDS. <br> - Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions. |

## Other information

Store in original containers in approved flame-proof area
No smoking, naked lights, heat or ignition sources.
DO NOT store in pits, depression, basement or areas where vapours may be trapped.
Keep containers securely sealed.
Store away from incompatible materials in a cool, dry well ventilated area.
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

- Packing as supplied by manufacturer.
* Plastic containers may only be used if approved for flammable liquid.

Suitable container

- 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.


## Storage incompatibility



X - Must not be stored together
0 - May be stored together with specific preventions

- May be stored together

Note: Depending on other risk factors, compatibility assessment based on the table above may not be relevant to storage situations, particularly where large volumes of dangerous goods are stored and handled. Reference should be made to the Safety Data Sheets for each substance or article and risks assessed accordingly.

## SECTION 8 Exposure controls / personal protection

## Control parameters

Occupational Exposure Limits (OEL)
INGREDIENT DATA

| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New Zealand Workplace Exposure Standards (WES) | ethyl acetate | Ethyl acetate | 200 ppm / 720 $\mathrm{mg} / \mathrm{m} 3$ | Not Available | Not <br> Available | Not Available |
| New Zealand Workplace Exposure Standards (WES) | toluene | Toluene (Toluol) | 20 ppm / 75 $\mathrm{mg} / \mathrm{m} 3$ | 377 mg/m3/ <br> 100 ppm | Not <br> Available | (skin) - Skin absorption oto - Ototoxin (bio) - Exposure can also be estimated by biological monitoring |

## Exposure controls

'adds' and 'removes' air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.
Employers may need to use multiple types of controls to prevent employee overexposure.
For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. Ventilation equipment should be explosion-resistant.
Air contaminants generated in the workplace possess varying 'escape' velocities which, in turn, determine the 'capture velocities' of fresh circulating air required to effectively remove the contaminant.
\(\left.\begin{array}{|l|l|}\hline Type of Contaminant: \& Air Speed: <br>
\hline solvent, vapours, degreasing etc., evaporating from tank (in still air). \& 0.25-0.5 \mathrm{~m} / \mathrm{s} <br>
\& (50-100 <br>

\mathrm{f} / \mathrm{min} .)\end{array}\right]\)| aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, <br> plating acid fumes, pickling (released at low velocity into zone of active generation) | $(100-200$ |
| :--- | :--- |
| $\mathrm{f} / \mathrm{min})$. |  |

Within each range the appropriate value depends on:

| Lower end of the range | Upper end of the range |
| :--- | :--- |
| 1: Room air currents minimal or favourable to capture | 1: Disturbing room air currents |
| 2: Contaminants of low toxicity or of nuisance value only. | 2: Contaminants of high toxicity |
| 3: Intermittent, low production. | 3: High production, heavy use |
| 4: Large hood or large air mass in motion | 4: Small hood-local control only |

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

Adequate ventilation is typically taken to be that which limits the average concentration to no more than $25 \%$ of the LEL within the building, room or enclosure containing the dangerous substance.

Ventilation for plant and machinery is normally considered adequate if it limits the average concentration of any dangerous substance that might potentially be present to no more than $25 \%$ of the LEL. However, an increase up to a maximum $50 \%$ LEL can be acceptable where additional safeguards are provided to prevent the formation of a hazardous explosive atmosphere. For example, gas detectors linked to emergency shutdown of the process might be used together with maintaining or increasing the exhaust ventilation on solvent evaporating ovens and gas turbine enclosures.

Temporary exhaust ventilation systems may be provided for non-routine higher-risk activities, such as cleaning, repair or maintenance in tanks or other confined spaces or in an emergency after a release. The work procedures for such activities should be carefully considered.. The atmosphere should be continuously monitored to ensure that ventilation is adequate and the area remains safe. Where workers will enter the space, the ventilation should ensure that the concentration of the dangerous substance does not exceed $10 \%$ of the LEL (irrespective of the provision of suitable breathing apparatus)

## Personal protection

Eye and face protection

## Skin protection

Hands/feet 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. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]


## See Hand protection below

- Wear chemical protective gloves, e.g. PVC.
* Wear safety footwear or safety gumboots, e.g. Rubber

For esters:

- Do NOT use natural rubber, butyl rubber, EPDM or polystyrene-containing materials.

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.
Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:
frequency and duration of contact,

- chemical resistance of glove material,
glove thickness and
dexterity
Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).
When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
- When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN

Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long-term use.
Contaminated gloves should be replaced.
As defined in ASTM F-739-96 in any application, gloves are rated as:
Excellent when breakthrough time $>480 \mathrm{~min}$
Good when breakthrough time $>20 \mathrm{~min}$
Fair when breakthrough time $<20 \mathrm{~min}$
Poor when glove material degrades
For general applications, gloves with a thickness typically greater than 0.35 mm , are recommended.
It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times.
Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers technical data should always be taken into account to ensure selection of the most appropriate glove for the task.
Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example:

- Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of.
Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential
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

## Other protection

See Other protection below

- Overalls.
- PVC Apron
- PVC protective suit may be required if exposure severe

Eyewash unit

- Ensure there is ready access to a safety shower.
- 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. Electrical resistance must range between 0 to 500,000 ohms. Conductive shoes should be stored in lockers close to the room in which they are worn. Personnel who have been issued conductive footwear should not wear them from their place of work to their homes and return.


## 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 computergenerated selection:
Altex Thinning Solvent \#20

| Material | CPI |
| :--- | :--- |
| PE/EVAL/PE | A |
| PVA | A |
| TEFLON | B |
| VITON/CHLOROBUTYL | B |
| BUTYL | C |
| BUTYL/NEOPRENE | C |
| CPE | C |
| HYPALON | C |
| NATURAL RUBBER | C |
| NATURAL+NEOPRENE | C |
| NEOPRENE | C |
| NEOPRENE/NATURAL | C |
| NITRILE | C |
| NITRILE+PVC | C |
| PVC | C |
| SARANEX-23 | C |
| SARANEX-23 2-PLY | C |
| VITON | C |
| VITON/NEOPRENE | 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 <br> Protection Factor | Half-Face <br> Respirator | Full-Face <br> Respirator | Powered Air <br> Respirator |
| :--- | :--- | :--- | :--- |
| up to $10 \times$ ES | A-AUS | - | A-PAPR-AUS / <br> Class 1 |
| up to $50 \times$ ES | - | A-AUS / Class 1 | - |
| up to $100 \times$ ES | - | A-2 | A-PAPR-2^ |

$\wedge$ - 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), $\mathrm{G}=$ Agricultural chemicals, $\mathrm{K}=$ Ammonia(NH3), $\mathrm{Hg}=$ Mercury, $\mathrm{NO}=$ Oxides of nitrogen, $\mathrm{MB}=$ Methyl bromide, $\mathrm{AX}=$ 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

| Appearance | clear liquid |  |  |
| :---: | :---: | :---: | :---: |
| Physical state | Liquid | Relative density ( Water $=1$ ) | 0.93 |
| Odour | Not Available | Partition coefficient n-octanol / water | Not Available |
| Odour threshold | Not Available | Auto-ignition temperature ( ${ }^{\circ} \mathrm{C}$ ) | 355 |
| pH (as supplied) | Not Available | Decomposition temperature $\left({ }^{\circ} \mathrm{C}\right)$ | Not Available |
| Melting point / freezing point ( ${ }^{\circ} \mathrm{C}$ ) | Not Available | Viscosity (cSt) | Not Available |
| Initial boiling point and boiling range ( ${ }^{\circ} \mathrm{C}$ ) | 115 | Molecular weight ( $\mathrm{g} / \mathrm{mol}$ ) | Not Available |
| Flash point ( ${ }^{\circ} \mathrm{C}$ ) | 21 | Taste | Not Available |
| Evaporation rate | 2.1 $\mathrm{BuAC}=1$ | Explosive properties | Not Available |
| Flammability | HIGHLY FLAMMABLE. | Oxidising properties | Not Available |
| Upper Explosive Limit (\%) | 8.6 | Surface Tension (dyn/cm or $\mathrm{mN} / \mathrm{m}$ ) | Not Available |
| Lower Explosive Limit (\%) | 1.8 | Volatile Component (\%vol) | 100 |
| Vapour pressure (kPa) | 4.4 | Gas group | Not Available |
| Solubility in water | Immiscible | pH as a solution ( Not Available\%) | Not Available |
| Vapour density ( $\mathrm{Air}=1$ ) | 3.8 | VOC g/L | 926.37 |

## SECTION 10 Stability and reactivity

| Reactivity | See section 7 |
| :---: | :---: |
| Chemical stability | - Unstable in the presence of incompatible materials. <br> - Product is considered stable. <br> - Hazardous polymerisation will not occur. |
| Possibility of hazardous reactions | See section 7 |
| Conditions to avoid | See section 7 |
| Incompatible materials | See section 7 |
| Hazardous decomposition products | See section 5 |

## SECTION 11 Toxicological information

## Information on toxicological effects

The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. 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 hazard is increased at higher temperatures.
Inhaled
menache, dizziness, nausea, anaesheic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal.
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.

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.
Ingestion At sufficiently high doses the material may be hepatotoxic (i.e. poisonous to the liver).
Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733)

Skin contact is not thought to produce harmful health effects (as classified under EC Directives using animal models). Systemic harm, however, has been identified following exposure of animals by at least one other route and the material may still produce health damage following entry through wounds, lesions or abrasions.
Skin Contact Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.
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

Skin contact with the material may damage the health of the individual; systemic effects may result following absorption.

This material can cause eye irritation and damage in some persons.
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.

Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochemical systems.
Chronic Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following
There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment.

## Altex Thinning Solvent \#20

propylene glycol monomethyl
ether acetate, alpha-isomer ether acetate, alpha-isomer
$\square$
ethyl acetate

| TOXICITY | IRRITATION |
| :--- | :--- |
| Not Available | Not Available |

## TOXICITY

dermal (rat) LD50: >2000 mg/kg ${ }^{[1]}$
Oral (Rat) LD50; $3739 \mathrm{mg} / \mathrm{kg}^{[2]}$

## IRRITATION

Eye: no adverse effect observed (not irritating) ${ }^{[1]}$
Skin: no adverse effect observed (not irritating) ${ }^{[1]}$

| IRRITATION |
| :--- |
| Eye (human): 400 ppm |
| Eye: no adverse effect observed (not irritating) ${ }^{[1]}$ |
| Skin: no adverse effect observed (not irritating) ${ }^{[1]}$ |

## TOXICITY

Dermal (rabbit) LD50: $12124 \mathrm{mg} / \mathrm{kg}^{[2]}$
Inhalation(Rat) LC50; >13350 ppm4h ${ }^{[2]}$
Oral (Rat) LD50; $636 \mathrm{mg} / \mathrm{kg}{ }^{[2]}$
IRRITATION

| Eye (rabbit): $2 \mathrm{mg} / 24 \mathrm{~h}$ - SEVERE |
| :--- |
| Eye (rabbit):0.87 mg - mild |
| Eye (rabbit): $100 \mathrm{mg} / 30$ sec - mild |
| Eye: adverse effect observed (irritating) ${ }^{[1]}$ |
| Skin (rabbit): $20 \mathrm{mg} / 24 \mathrm{~h}$-moderate |
| Skin (rabbit):500 mg - moderate |
| Skin: adverse effect observed (irritating) ${ }^{[1]}$ |
| Skin: no adverse effect observed (not irritating) ${ }^{[1]}$ |

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

| Acute Toxicity | $\times$ | Carcinogenicity | $\times$ |
| :---: | :---: | :---: | :---: |
| Skin Irritation/Corrosion | $\times$ | Reproductivity | $\checkmark$ |
| Serious Eye Damage/lrritation | $\checkmark$ | STOT - Single Exposure | $\times$ |
| Respiratory or Skin sensitisation | X | STOT - Repeated Exposure | $\checkmark$ |
| Mutagenicity | $\times$ | Aspiration Hazard | X |

## SECTION 12 Ecological information

## Toxicity

| Altex Thinning Solvent \#20 | 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 | 72h | Algae or other aquatic plants |  | >1000mg/l | 2 |
| propylene glycol monomethyl | EC50 | 48h | Crustacea |  | 373mg/l | 2 |
| ether acetate, alpha-isomer | NOEC(ECx) | 336h | Fish |  | $47.5 \mathrm{mg} / \mathrm{l}$ | 2 |
|  | LC50 | 96 h | Fish |  | 100mg/l | 1 |
|  | EC50 | 96h | Algae or other aquatic plants |  | $>1000 \mathrm{mg} / \mathrm{l}$ | 2 |
| ethyl acetate | Endpoint | Test Duration (hr) | Species |  | Value | Source |


|  | EC50 | 48h | Crustacea | 164mg/l | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | NOEC(ECx) | 72h | Algae or other aquatic plants | >100mg// | 1 |
|  | LC50 | 96 h | Fish | >75.6mg/l | 2 |
| toluene | Endpoint | Test Duration (hr) | Species | Value | Source |
|  | EC50 | 48h | Crustacea | $3.78 \mathrm{mg} / \mathrm{L}$ | 5 |
|  | NOEC(ECx) | 168h | Crustacea | $0.74 \mathrm{mg} / \mathrm{L}$ | 5 |
|  | LC50 | 96h | Fish | $5-35 \mathrm{mg} / \mathrm{l}$ | 4 |
|  | EC50 | 96 h | Algae or other aquatic plants | >376.71mg/L | 4 |

Legend: Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 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

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.
Wastes resulting from use of the product must be disposed of on site or at approved waste sites.
DO NOT discharge into sewer or waterways.

## Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
| :--- | :--- | :--- |
| propylene glycol monomethyl <br> ether acetate, alpha-isomer | LOW | LOW |
| ethyl acetate | LOW (Half-life $=14$ days) | LOW (Half-life $=14.71$ days) |
| toluene | LOW (Half-life $=28$ days) | LOW (Half-life $=4.33$ days) |

Bioaccumulative potential

| Ingredient | Bioaccumulation |
| :--- | :--- |
| propylene glycol monomethyl <br> ether acetate, alpha-isomer | LOW $($ LogKOW $=0.56)$ |
| ethyl acetate | HIGH $(\mathrm{BCF}=3300)$ |
| toluene | LOW $(\mathrm{BCF}=90)$ |
|  | Mobility |
| Mobility in soil <br> Ingredient | HIGH $(\mathrm{KOC}=1.838)$ |
| propylene glycol monomethyl <br> ether acetate, alpha-isomer | LOW $(\mathrm{KOC}=6.131)$ |
| ethyl acetate | LOW $(\mathrm{KOC}=268)$ |
| toluene |  |

## SECTION 13 Disposal considerations

## Waste treatment methods

Product / Packaging disposa

- Containers may still present a chemical hazard/ danger when empty.
- Return to supplier for reuse/ recycling if possible.


## 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.
- 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. 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.

- 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. Observe all label safeguards until containers are cleaned and destroyed.

Ensure that the hazardous substance is disposed in accordance with the Hazardous Substances (Disposal) Notice 2017

## Disposal Requirements

Packages that have been in direct contact with the hazardous substance must be only disposed if the hazardous substance was appropriately removed and cleaned out from the package. The package must be disposed according to the manufacturer's directions taking into account the material it is made of. Packages which hazardous content have been appropriately treated and removed may be recycled.
The hazardous substance must only be disposed if it has been treated by a method that changed the characteristics or composition of the substance and it is no longer hazardous. DO NOT deposit the hazardous substance into or onto a landfill or a sewage facility.
Burning the hazardous substance must happen under controlled conditions with no person or place exposed to

1) a blast overpressure of more than 9 kPa ; or
(2) an unsafe level of heat radiation.

The disposed hazardous substance must not come into contact with class 1 or 5 substances.

## SECTION 14 Transport information

## Labels Required

|  |  |  |
| :---: | :---: | :---: |
| Marine Pollutant | NO |  |
| HAZCHEM | $\cdot 3 \mathrm{Y}$ |  |
| Land transport (UN) |  |  |
| 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) | Class 3 |  |
|  | Subrisk Not Ap | able |
| Packing group | III |  |
| Environmental hazard | Not Applicable |  |
| Special precautions for user | Special provisions | 163; 223; 367 |
|  | Limited quantity | 5L |


|  |  |  |  |
| :---: | :---: | :---: | :---: |
| UN number | 1263 |  |  |
| UN proper shipping name | Paint related material (including paint thinning or reducing compounds); Paint (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) |  |  |
| Transport hazard class(es) | ICAO/IATA Class | 3 |  |
|  | ICAO / IATA Subrisk | Not Applicable |  |
|  | ERG Code | 3L |  |
| Packing group | III |  |  |
| Environmental hazard | Not Applicable |  |  |
| Special precautions for user | Special provisions |  | А3 A72 A192 |
|  | Cargo Only Packing Instructions |  | 366 |
|  | Cargo Only Maximum Qty / Pack |  | 220 L |
|  | Passenger and Cargo Packing Instructions |  | 355 |
|  | Passenger and Cargo Maximum Qty / Pack |  | 60 L |
|  | Passenger and Cargo Limited Quantity Packing Instructions |  | Y344 |
|  | Passenger and Cargo Limited Maximum Qty / Pack |  | 10 L |

Sea transport (IMDG-Code / GGVSee)

| 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 <br> (including paint thinning or reducing compound) |  |
| Transport hazard class(es) | IMDG Class 3 <br> Packing group IMDG Subrisk | Not Applicable |
| Environmental hazard | Not Applicable |  |


| Special precautions for user | EMS Number | F-E, S-E |
| :--- | :--- | :--- |
| Special provisions 163223367955 <br> Limited Quantities 5 L 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
This substance is to be managed using the conditions specified in an applicable Group Standard

| HSR Number | Group Standard |
| :--- | :--- |
| HSR002662 | Surface Coatings and Colourants Flammable Group Standard 2020 |

Please refer to Section 8 of the SDS for any applicable tolerable exposure limit or Section 12 for environmental exposure limit.

## Hazardous Substance Location

Subject to the Health and Safety at Work (Hazardous Substances) Regulations 2017.

| Hazard Class | Quantity (Closed Containers) | Quantity (Open Containers) |
| :--- | :--- | :--- |
| Flammable Liquid Category 2 | 100 L in containers more than 5 L | 50 L |
| Flammable Liquid Category 2 | 250 L in containers up to and including 5 L | 50 L |

## Certified Handler

Subject to Part 4 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

| Class of substance | Quantities |
| :--- | :--- |
| Not Applicable | Not Applicable |

Refer Group Standards for further information
Maximum quantities of certain hazardous substances permitted on passenger service vehicles
Subject to Regulation 13.14 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

| Hazard Class | Gas (aggregate water capacity in $\mathbf{m L}$ ) | Liquid (L) | Solid (kg) | Maximum quantity per package for each classification |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Flammable Liquid Category 2 |  |  |  | 1 L |

## Tracking Requirements <br> Not Applicable

## National Inventory Status

| National Inventory | Status |
| :--- | :--- |
| Australia - AIIC / Australia <br> Non-Industrial Use | Yes |
| Canada - DSL | Yes |
| Canada - NDSL | No (propylene glycol monomethyl ether acetate, alpha-isomer; ethyl acetate; toluene) |
| China - IECSC | Yes |
| Europe - EINEC / ELINCS / NLP | Yes |
| Japan - ENCS | Yes |
| Korea - KECI | Yes |
| New Zealand - NZloC | Yes |
| Philippines - PICCS | Yes |
| USA - TSCA | Yes |
| Taiwan - TCSI | Yes |
| Mexico - INSQ | Yes |
| Vietnam - NCI | Yes = All CAS declared ingredients are on the inventory |
| Russia - FBEPH | No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration. |
| Legend: |  |


| Revision Date | 06/10/2022 |  |
| :---: | :---: | :---: |
| Initial Date | 06/12/2017 |  |
| SDS Version Summary |  |  |
| Version | Date of Update | Sections Updated |
| 2.6 | 06/10/2022 | Classification, Ingredients, Physical Properties |

## 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
NZloC: 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
Powered by AuthorITe, from Chemwatch.

