

Permatex Low Strength Threadlocker Purple

ITW AAMTech

Chemwatch: 41-0441

Version No: 3.1.1.1

Material Safety Data Sheet according to NOHSC and ADG requirements

Chemwatch Hazard Alert Code: 3

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Initial Date: Not Available

S.Local.AUS.EN

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

Product Identifier

| | |
|-------------------------------|---|
| Product name | Permatex Low Strength Threadlocker Purple |
| Synonyms | PX24024 |
| Other means of identification | Not Available |

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

| | |
|--------------------------|---|
| Relevant identified uses | Use according to manufacturer's directions. UV/ EB-curing is a drying technology for coatings, inks and adhesives. It uses light of a certain wavelength or high speed electrons to give almost instantaneous dry films. It allows formulators to develop products for a wide variety of applications and substrates without using volatile organic compounds as solvents. |
|--------------------------|---|

Details of the manufacturer/importer

| | |
|-------------------------|---------------------------------------|
| Registered company name | ITW AAMTech |
| Address | 100 Hassall Street 2164 NSW Australia |
| Telephone | 1800 177 989 |
| Fax | 1800 308 556 |
| Website | www.aamtech.com.au |
| Email | info@aamtech.com.au |

Emergency telephone number

| | |
|-----------------------------------|-----------------|
| Association / Organisation | Not Available |
| Emergency telephone numbers | 1800 039 008 |
| Other emergency telephone numbers | +61 3 9573 3112 |

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture


HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.

| | | |
|-----------------------------------|---|---|
| Poisons Schedule | Not Applicable | |
| Risk Phrases ^[1] | R36/37/38 | Irritating to eyes, respiratory system and skin. |
| | R52/53 | Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| | R66 | Repeated exposure may cause skin dryness and cracking. |
| | R49 | May cause CANCER by inhalation. |
| Legend: | 1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI | |
| GHS Classification ^[1] | Skin Corrosion/Irritation Category 2, Eye Irritation Category 2, Carcinogen Category 1A, STOT - SE (Resp. Irr.) Category 3, Chronic Aquatic Hazard Category 3 | |

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Legend: 1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

Label elements

| | |
|--------------------|---|
| GHS label elements |   |
| SIGNAL WORD | DANGER |

Hazard statement(s)

| | |
|--------|---|
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| H350 | May cause cancer |
| H335 | May cause respiratory irritation |
| H412 | Harmful to aquatic life with long lasting effects |
| AUH066 | Repeated exposure may cause skin dryness and cracking |

Precautionary statement(s) Prevention

| | |
|------|--|
| P201 | Obtain special instructions before use. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |

Precautionary statement(s) Response

| | |
|----------------|--|
| P308+P313 | IF exposed or concerned: Get medical advice/attention. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P312 | Call a POISON CENTER/doctor/physician/first aider/if you feel unwell. |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |

Precautionary statement(s) Storage

| | |
|-----------|--|
| P405 | Store locked up. |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |

Precautionary statement(s) Disposal

| | |
|------|--|
| P501 | Dispose of contents/container to authorised chemical landfill or if organic to high temperature incineration |
|------|--|

Label elements



Relevant risk statements are found in section 2

| | |
|-------------------------|-------|
| Indication(s) of danger | T, Xi |
|-------------------------|-------|

SAFETY ADVICE

| | |
|-----|--|
| S02 | Keep out of reach of children. |
| S21 | When using do not smoke. |
| S23 | Do not breathe gas/fumes/vapour/spray. |
| S24 | Avoid contact with skin. |
| S26 | In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre. |
| S35 | This material and its container must be disposed of in a safe way. |
| S37 | Wear suitable gloves. |
| S39 | Wear eye/face protection. |

Continued...

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| | |
|------------|--|
| S40 | To clean the floor and all objects contaminated by this material, use water and detergent. |
| S46 | If swallowed, seek medical advice immediately and show this container or label. |
| S53 | Avoid exposure - obtain special instructions before use. |
| S56 | Dispose of this material and its container at hazardous or special waste collection point. |
| S64 | If swallowed, rinse mouth with water (only if the person is conscious). |

Other hazards

| | |
|--|--|
| | Possible respiratory and skin sensitizer*. |
| | Cumulative effects may result following exposure*. |
| | Ingestion may produce health damage*. |

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

| CAS No | %[weight] | Name |
|------------|-----------|--|
| 25852-47-5 | >50 | polyethylene glycol dimethacrylate |
| 9004-96-0 | 20-40 | oleic acid, ethoxylated |
| 67762-90-7 | <5 | silica, dimethylsiloxane treated |
| 80-15-9 | <3 | cumyl hydroperoxide |
| 13463-67-7 | 0.1-1 | titanium dioxide |

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"> ▶ Wash out immediately with fresh running water. ▶ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. ▶ Seek medical attention without delay; if pain persists or recurs seek medical attention. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. |
| Skin Contact | <p>If skin contact occurs:</p> <ul style="list-style-type: none"> ▶ Immediately remove all contaminated clothing, including footwear. ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation. |
| Inhalation | <ul style="list-style-type: none"> ▶ If fumes or combustion products are inhaled remove from contaminated area. ▶ Lay patient down. Keep warm and rested. ▶ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. ▶ Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. ▶ Transport to hospital, or doctor, without delay. |
| Ingestion | <ul style="list-style-type: none"> ▶ 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

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

| | |
|--|---|
| | <ul style="list-style-type: none"> ▶ Water spray or fog. ▶ Alcohol stable foam. |
|--|---|

Continued...

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- ▶ Dry chemical powder.
- ▶ Carbon dioxide.

Special hazards arising from the substrate or mixture

Fire Incompatibility

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

Advice for firefighters

Fire Fighting

- ▶ Alert Fire Brigade and tell them location and nature of hazard.
- ▶ May be violently or explosively reactive.
- ▶ Wear full body protective clothing with breathing apparatus.
- ▶ Prevent, by any means available, spillage from entering drains or water course.

Fire/Explosion Hazard

- ▶ Combustible.
- ▶ Slight fire hazard when exposed to heat or flame.
- ▶ Heating may cause expansion or decomposition leading to violent rupture of containers.
- ▶ On combustion, may emit toxic fumes of carbon monoxide (CO).

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills

- Slippery when spilt.
- ▶ Remove all ignition sources.
 - ▶ Clean up all spills immediately.
 - ▶ Avoid breathing vapours and contact with skin and eyes.

Major Spills

- Slippery when spilt.
- ▶ **DO NOT touch the spill material**
- Moderate hazard.
- ▶ Clear area of personnel and move upwind.
 - ▶ Alert Fire Brigade and tell them location and nature of hazard.

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling

- ▶ Most acrylic monomers have low viscosity therefore pouring, material transfer and processing of these materials do not necessitate heating.
- ▶ Viscous monomers may require heating to facilitate handling. To facilitate product transfer from original containers, product must be heated to no more than 60 deg. C. (140 F.), for not more than 24 hours.

Other information

Ethoxylates/ alkoxyates react slowly with air or oxygen. Storage under heated conditions in the presence of air or oxygen increases reaction rate. For example, after storing at 95 F/ 35 C for 30 days in the presence of air, there is measurable oxidation of the ethoxylate. Lower temperatures will allow for longer storage time and higher temperatures will shorten the storage time if stored under an air or oxygen atmosphere.

Conditions for safe storage, including any incompatibilities

Suitable container

- For ethoxylates suitable containers include carbon steel coated with baked phenolic. Any moisture may cause rusting of carbon steel.
- If product is moisture free, uncoated carbon steel tanks may be used.
- ▶ Metal can or drum
 - ▶ Packaging as recommended by manufacturer.

Storage incompatibility

- ▶ Polymerisation may occur slowly at room temperature.
- ▶ Storage requires stabilising inhibitor content and dissolved oxygen content to be monitored. Refer to manufacturer's recommended levels.
- ▶ **DO NOT overfill containers so as to maintain free head space above product.**

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

Continued...

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INGREDIENT DATA


| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
|------------------------------|------------------|----------------------|----------|---------------|---------------|---------------|
| Australia Exposure Standards | titanium dioxide | Titanium dioxide (a) | 10 mg/m3 | Not Available | Not Available | Not Available |

EMERGENCY LIMITS

| Ingredient | Material name | TEEL-1 | TEEL-2 | TEEL-3 |
|------------------------------------|--|------------|------------|------------|
| polyethylene glycol dimethacrylate | Polyethylene glycol dimethacrylate | 30 mg/m3 | 330 mg/m3 | 2000 mg/m3 |
| silica, dimethylsiloxane treated | Siloxanes and silicones, dimethyl, reaction products with silica; (Hydrophobic silicon dioxide, amorphous) | 0.07 mg/m3 | 0.77 mg/m3 | 4.6 mg/m3 |
| cumyl hydroperoxide | Cumene hydroperoxide; (Isopropylbenzene hydroperoxide) | 1.1 ppm | 1.1 ppm | 9.7 ppm |
| titanium dioxide | Titanium oxide; (Titanium dioxide) | 10 mg/m3 | 10 mg/m3 | 10 mg/m3 |

| Ingredient | Original IDLH | Revised IDLH |
|------------------------------------|-----------------------|---------------|
| polyethylene glycol dimethacrylate | Not Available | Not Available |
| oleic acid, ethoxylated | Not Available | Not Available |
| silica, dimethylsiloxane treated | Not Available | Not Available |
| cumyl hydroperoxide | Not Available | Not Available |
| titanium dioxide | N.E. mg/m3 / N.E. ppm | 5,000 mg/m3 |

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"> Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. |
| Skin protection | See Hand protection below |
| Hands/feet protection | <p>NOTE:</p> <ul style="list-style-type: none"> The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed. <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.</p> |
| Body protection | See Other protection below |
| Other protection | <ul style="list-style-type: none"> Overalls. P.V.C. apron. Barrier cream. |
| Thermal hazards | 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:

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| Material | CPI |
|----------|-----|
|----------|-----|

Respiratory protection

Type A-P 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.

Continued...

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| | |
|--------|---|
| TEFLON | 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.

| Required Minimum Protection Factor | Half-Face Respirator | Full-Face Respirator | Powered Air Respirator |
|------------------------------------|----------------------|----------------------|-------------------------|
| up to 10 x ES | A-AUS P2 | - | A-PAPR-AUS / Class 1 P2 |
| up to 50 x ES | - | A-AUS / Class 1 P2 | - |
| up to 100 x ES | - | A-2 P2 | A-PAPR-2 P2 ^ |

^ - 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

| | | | |
|---|---|--|----------------|
| Appearance | Purple liquid with a mild odour; not miscible with water. | | |
| Physical state | Liquid | Relative density (Water = 1) | 1.05 |
| Odour | Not Available | Partition coefficient n-octanol / water | Not Available |
| Odour threshold | Not Available | Auto-ignition temperature (°C) | Not Available |
| pH (as supplied) | Not Applicable | Decomposition temperature | Not Available |
| Melting point / freezing point (°C) | Not Available | Viscosity (cSt) | Not Available |
| Initial boiling point and boiling range (°C) | >93 | Molecular weight (g/mol) | Not Applicable |
| Flash point (°C) | >93 (TCC) | Taste | Not Available |
| Evaporation rate | Not Available | Explosive properties | Not Available |
| Flammability | Not Applicable | 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) | VOC < 3% |
| Vapour pressure (kPa) | Not Available | Gas group | Not Available |
| Solubility in water (g/L) | Immiscible | pH as a solution(1%) | Not Applicable |
| Vapour density (Air = 1) | >1 | VOC g/L | Not Available |

SECTION 10 STABILITY AND REACTIVITY

| | |
|---|--|
| Reactivity | See section 7 |
| Chemical stability | <ul style="list-style-type: none"> Stable under controlled storage conditions provided material contains adequate stabiliser / polymerisation inhibitor. Bulk storages may have special storage requirements WARNING: Gradual decomposition in strong, sealed containers may lead to a large pressure build-up and subsequent explosion. Rapid and violent polymerisation possible at temperatures above 32 deg c. Unstable in the presence of incompatible materials. |
| Possibility of hazardous reactions | See section 7 |
| Conditions to avoid | See section 7 |
| Incompatible materials | See section 7 |
| Hazardous decomposition products | See section 5 |

Continued...

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SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

| | |
|---------------------|---|
| Inhaled | The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. No report of respiratory illness in humans as a result of exposure to multifunctional acrylates has been found. Inhalation hazard is increased at higher temperatures. |
| Ingestion | Accidental ingestion of the material may be damaging to the health of the individual. Nonionic surfactants may produce localised irritation of the oral or gastrointestinal lining and induce vomiting and mild diarrhoea. |
| Skin Contact | The material may cause severe inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering. Repeated exposure may cause skin cracking, flaking or drying following normal handling and use. All multifunctional acrylates (MFA) produce skin disorders and sensitise the skin and inflammation. |
| Eye | There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain. Non-ionic surfactants can cause numbing of the cornea, which masks discomfort normally caused by other agents and leads to corneal injury. Irritation varies depending on the duration of contact, the nature and concentration of the surfactant. |
| Chronic | Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. There is some evidence that inhaling this product is more likely to cause a sensitisation reaction in some persons compared to the general population. |

| | | |
|--|---|---|
| Permatex Low Strength Threadlocker Purple | TOXICITY | IRRITATION |
| | Not Available | Not Available |
| polyethylene glycol dimethacrylate | TOXICITY | IRRITATION |
| | Oral (rat) LD50: >10000 mg/kg ^[2] | Eye - Severe irritant Skin - Severe irritant |
| oleic acid, ethoxylated | TOXICITY | IRRITATION |
| | Oral (rat) LD50: 3000 mg/kg** ^[2] | [Harcros]* Eye (rabbit): 500 mg/24h - mild Eye (rabbit): moderate to SEVERE* Skin (rabbit): 500 mg/24h -mild Skin (rabbit): mild* |
| | | |
| | | |
| | | |
| silica, dimethylsiloxane treated | TOXICITY | IRRITATION |
| | Oral (rat) LD50: >5000 mg/kg ^[2] | [Cabot] Eyes: 0.7/110 24hr Draize non-irritating Skin: 0/8 non-irritating |
| | | |
| | | |
| cumyl hydroperoxide | TOXICITY | IRRITATION |
| | dermal (rat) LD50: >515<1 mg/kg ^[1] | Eye (rabbit): 1 mg Skin (rabbit): 500 mg - mild |
| | Inhalation (rat) LC50: 220 ppm/4hg ^[2] | |
| titanium dioxide | Oral (rat) LD50: 1431.7 mg/kg ^[1] | |
| | TOXICITY | IRRITATION |
| | Inhalation (rat) LC50: >2.28 mg/l4 h ^[1] | Skin (human): 0.3 mg /3D (int)-mild * |
| | Inhalation (rat) LC50: >3.56 mg/l4 h ^[1] | |
| | Inhalation (rat) LC50: >6.82 mg/l4 h ^[1] | |
| | Inhalation (rat) LC50: 3.43 mg/l4 h ^[1] | |
| | Inhalation (rat) LC50: 5.09 mg/l4 h ^[1] | |

Continued...

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Oral (rat) LD50: >2000 mg/kg^[1]**Legend:**

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

OLEIC ACID, ETHOXYLATED

The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

SILICA, DIMETHYLSILOXANE TREATED

For silica amorphous:

When experimental animals inhale synthetic amorphous silica (SAS) dust, it dissolves in the lung fluid and is rapidly eliminated. If swallowed, the vast majority of SAS is excreted in the faeces and there is little accumulation in the body. Following absorption across the gut, SAS is eliminated via urine without modification in animals and humans. SAS is not expected to be broken down (metabolised) in mammals.

CUMYL HYDROPEROXIDE

The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

Asthma-like symptoms may continue for months or even years after exposure to the material ceases.

Bacterial cell mutagen Equivocal tumorigen by RTECS criteria

TITANIUM DIOXIDE

The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

Exposure to titanium dioxide is via inhalation, swallowing or skin contact.

* IUCLID

Permatex Low Strength Threadlocker Purple, POLYETHYLENE GLYCOL DIMETHACRYLATE

Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS.

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

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

CMR STATUS

Not Applicable

SECTION 12 ECOLOGICAL INFORMATION**Toxicity**

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.

Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|------------|-------------------------|------------------|
|------------|-------------------------|------------------|

Continued...

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| | | |
|---------------------|---------------------------|-----------------------------|
| cumyl hydroperoxide | LOW (Half-life = 56 days) | LOW (Half-life = 5.42 days) |
| titanium dioxide | HIGH | HIGH |

Bioaccumulative potential

| Ingredient | Bioaccumulation |
|---------------------|------------------|
| cumyl hydroperoxide | LOW (BCF = 35.5) |
| titanium dioxide | LOW (BCF = 10) |

Mobility in soil

| Ingredient | Mobility |
|---------------------|-------------------|
| cumyl hydroperoxide | LOW (KOC = 2346) |
| titanium dioxide | LOW (KOC = 23.74) |

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

| | |
|------------------------------|--|
| Product / Packaging disposal | <p>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.</p> <p>A Hierarchy of Controls seems to be common - the user should investigate:</p> <ul style="list-style-type: none"> ▶ Reduction ▶ Reuse ▶ Recycling ▶ Disposal (if all else fails) <p>This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.</p> |
|------------------------------|--|

SECTION 14 TRANSPORT INFORMATION

Labels Required

| | |
|------------------|----------------|
| Marine Pollutant | NO |
| HAZCHEM | Not Applicable |

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

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

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

Transport in bulk according to Annex II of MARPOL 73 / 78 and the IBC code

| Source | Ingredient | Pollution Category |
|---|------------------|--------------------|
| IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk | titanium dioxide | Z |

SECTION 15 REGULATORY INFORMATION

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

| | |
|---|---|
| polyethylene glycol dimethacrylate(25852-47-5) is found on the following regulatory lists | "Australia Inventory of Chemical Substances (AICS)" |
| oleic acid, ethoxylated(9004-96-0) is found on the following regulatory lists | "Australia Inventory of Chemical Substances (AICS)" |
| silica, dimethylsiloxane treated(67762-90-7) is found on the following regulatory lists | "Australia Inventory of Chemical Substances (AICS)" |

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| | |
|--|--|
| cumyl hydroperoxide(80-15-9) is found on the following regulatory lists | "Australia Inventory of Chemical Substances (AICS)", "Australia Hazardous Substances Information System - Consolidated Lists" |
| titanium dioxide(13463-67-7) is found on the following regulatory lists | "Australia Exposure Standards", "International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs", "Australia Inventory of Chemical Substances (AICS)" |

SECTION 16 OTHER INFORMATION

Other information

Ingredients with multiple cas numbers

| Name | CAS No |
|------------------|---|
| titanium dioxide | 100292-32-8, 101239-53-6, 116788-85-3, 12000-59-8, 12188-41-9, 12701-76-7, 12767-65-6, 12789-63-8, 1309-63-3, 1317-70-0, 1317-80-2, 1344-29-2, 13463-67-7, 185323-71-1, 185828-91-5, 188357-76-8, 188357-79-1, 195740-11-5, 221548-98-7, 224963-00-2, 246178-32-5, 252962-41-7, 37230-92-5, 37230-94-7, 37230-95-8, 37230-96-9, 39320-58-6, 39360-64-0, 39379-02-7, 416845-43-7, 494848-07-6, 494848-23-6, 494851-77-3, 494851-98-8, 55068-84-3, 55068-85-4, 552316-51-5, 62338-64-1, 767341-00-4, 97929-50-5, 98084-96-9 |

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.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net/references

The (M)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.

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