

Permatex Automatic Transmission RTV Gasket Maker

ITW AAMTech

Chemwatch Hazard Alert Code: 2

Chemwatch: 22-9207

Issue Date: 23/09/2014

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Print Date: 22/09/2015

Material Safety Data Sheet according to NOHSC and ADG requirements

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 Automatic Transmission RTV Gasket Maker |
| Synonyms | PX81180 |
| 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. Elastomeric rubber. |
|---------------------------------|--------------------------------------------------------------------|

Details of the supplier of the safety data sheet

| | | |
|--------------------------------|-----------------------------------------------------------------|---------------------------------------------------|
| Registered company name | ITW AAMTech | ITW AAMTech |
| Address | Unit 2/38 Trugood Drive, East Tamaki, Auckland 2013 New Zealand | 1-9 Nina Link, Dandenong South 3175 VIC Australia |
| Telephone | +800 438 996 | 1800 177 989 |
| Fax | +64 9272 1949 | 1800 308 556 |
| Website | www.aamtech.co.nz | www.aamtech.com.au |
| Email | info@aamtech.co.nz | info@aamtech.com.au |

Emergency telephone number

| | | |
|------------------------------------------|----------------|-----------------|
| Association / Organisation | Not Available | Not Available |
| Emergency telephone numbers | +800 2436 2255 | 1800 039 008 |
| Other emergency telephone numbers | Not Available | +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 Irritating to eyes. |
| Legend: | 1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI |
| GHS Classification ^[1] | Eye Irritation Category 2A |
| Legend: | 1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI |

Label elements

Permatex Automatic Transmission RTV Gasket Maker

GHS label elements



SIGNAL WORD

WARNING

Hazard statement(s)

| | |
|------|-------------------------------|
| H319 | Causes serious eye irritation |
|------|-------------------------------|

Precautionary statement(s) Prevention

| | |
|------|----------------------------------------------------------------------------|
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
|------|----------------------------------------------------------------------------|

Precautionary statement(s) Response

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

Precautionary statement(s) Storage

Precautionary statement(s) Disposal

Label elements



Relevant risk statements are found in section 2

Indication(s) of danger

Xi

SAFETY ADVICE

| | |
|-----|------------------------------------------------------------------------------------------------------------|
| S02 | Keep out of reach of children. |
| 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. |
| S39 | Wear eye/face protection. |
| 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. |
| 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

| |
|-------------------------------------------------------------|
| May produce discomfort of the respiratory system and skin*. |
| Ingestion may produce health damage*. |

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

| CAS No | %[weight] | Name |
|------------|-----------|---------------------------------------------|
| 70131-67-8 | 30-50 | <u>dimethylsiloxane, hydroxy-terminated</u> |
| 1317-65-3 | 20-40 | <u>limestone</u> |
| 68611-44-9 | 1-10 | <u>silica amorphous, fumed</u> |
| 63148-62-9 | 1-10 | <u>polydimethylsiloxane</u> |
| 2224-33-1 | 1-10 | <u>vinyltris(methylethylketoxime)silane</u> |

Continued...

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| | | |
|---------------------------------------------------------------------------|----------|----------------------------------------------------------------|
| 1333-86-4 | 0.1-1 | <u>carbon black</u> |
| Not Available | NotSpec. | during cure this material will react with atmospheric moisture |
| Not Available | NotSpec. | to release |
| 96-29-7 | NotSpec. | <u>methyl ethyl ketoxime</u> |
| during cure this material will react with atmospheric moisture to release | | |

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

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, aerosols or combustion products are inhaled remove from contaminated area. ▶ Other measures are usually unnecessary. |
| 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. ▶ Dry chemical powder. ▶ Carbon dioxide. |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Special hazards arising from the substrate or mixture

| | |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fire Incompatibility | <ul style="list-style-type: none"> ▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Advice for firefighters

| | |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fire Fighting | <ul style="list-style-type: none"> ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ Wear breathing apparatus plus protective gloves. ▶ Prevent, by any means available, spillage from entering drains or water courses. ▶ Use water delivered as a fine spray to control fire and cool adjacent area. |
| Fire/Explosion Hazard | Combustible. Will burn if ignited. Combustion products include; carbon monoxide (CO) carbon dioxide (CO2) silicon dioxide (SiO2) other pyrolysis products typical of burning organic material. May emit poisonous fumes. May emit corrosive fumes. |

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

| | |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Minor Spills | <p>Slippery when spilt.</p> <ul style="list-style-type: none"> ▶ Clean up all spills immediately. ▶ Avoid contact with skin and eyes. ▶ Wear impervious gloves and safety goggles. |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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Major Spills

- ▶ Clear area of personnel and move upwind.
- ▶ Alert Fire Brigade and tell them location and nature of hazard.
- ▶ Wear breathing apparatus plus protective gloves.
- ▶ Prevent, by any means available, spillage from entering drains or water course.

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling

- ▶ Avoid all personal contact, including inhalation.
- ▶ Wear protective clothing when risk of exposure occurs.
- ▶ Use in a well-ventilated area.
- ▶ Prevent concentration in hollows and sumps.

Other information

- ▶ Store in original containers.
- ▶ Keep containers securely sealed.
- ▶ Store in a cool, dry, well-ventilated area.
- ▶ Store away from incompatible materials and foodstuff containers.

Conditions for safe storage, including any incompatibilities

Suitable container

- ▶ Metal can or drum
- ▶ Packaging as recommended by manufacturer.
- ▶ Check all containers are clearly labelled and free from leaks.

Storage incompatibility

Traces of benzene, a carcinogen, may form when silicones are heated in air above 230 degrees C. Concentrated acids and bases cause degradation of polymer. Boiling water may soften and weaken material.

Silicas:

- ▶ react with hydrofluoric acid to produce silicon tetrafluoride gas
- ▶ react with xenon hexafluoride to produce explosive xenon trioxide
- ▶ reacts exothermically with oxygen difluoride, and explosively with chlorine trifluoride (these halogenated materials are not commonplace industrial materials) and other fluorine-containing compounds
- ▶ may react with fluorine, chlorates
- ▶ are incompatible with strong oxidisers, manganese trioxide, chlorine trioxide, strong alkalis, metal oxides, concentrated orthophosphoric acid, vinyl acetate
- ▶ may react vigorously when heated with alkali carbonates.

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 | limestone | Calcium carbonate (a) | 10 mg/m3 | Not Available | Not Available | Not Available |
| Australia Exposure Standards | carbon black | Carbon black | 3 mg/m3 | Not Available | Not Available | Not Available |

EMERGENCY LIMITS

| Ingredient | Material name | TEEL-1 | TEEL-2 | TEEL-3 |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------|------------|-------------|
| dimethylsiloxane, hydroxy-terminated | Dimethyl(polysiloxane); (Polydimethylsiloxane, silanol terminated; Dimethylsiloxane, poly, hydroxy end-blocked) | 190 mg/m3 | 2100 mg/m3 | 13000 mg/m3 |
| limestone | Limestone; (Calcium carbonate; Dolomite) | 27 mg/m3 | 27 mg/m3 | 1300 mg/m3 |
| limestone | Carbonic acid, calcium salt | 45 mg/m3 | 210 mg/m3 | 1300 mg/m3 |
| silica amorphous, fumed | Silica, amorphous fumed | 6 mg/m3 | 6 mg/m3 | 630 mg/m3 |
| polydimethylsiloxane | Dimethyl siloxane; (Dimethylpolysiloxane; Syltherm XLT; Syltherm 800; Silicone 360) | 1.5 mg/m3 | 16 mg/m3 | 990 mg/m3 |
| carbon black | Carbon black | 9 mg/m3 | 99 mg/m3 | 590 mg/m3 |
| methyl ethyl ketoxime | Butanone oxime; (Ethyl methyl ketoxime) | 10 ppm | 10 ppm | 52 ppm |


| Ingredient | Original IDLH | Revised IDLH |
|------------|---------------|--------------|
|------------|---------------|--------------|

Continued...

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| | | |
|----------------------------------------------------------------|-----------------------|---------------|
| dimethylsiloxane, hydroxy-terminated | Not Available | Not Available |
| limestone | Not Available | Not Available |
| silica amorphous, fumed | N.E. mg/m3 / N.E. ppm | 3,000 mg/m3 |
| polydimethylsiloxane | Not Available | Not Available |
| vinyltris(methylethylketoxime)silane | Not Available | Not Available |
| carbon black | N.E. mg/m3 / N.E. ppm | 1,750 mg/m3 |
| during cure this material will react with atmospheric moisture | Not Available | Not Available |
| to release | Not Available | Not Available |
| methyl ethyl ketoxime | Not Available | Not Available |

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 | <ul style="list-style-type: none"> ▶ Wear chemical protective gloves, e.g. PVC. ▶ Wear safety footwear or safety gumboots, e.g. Rubber |
| 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:

Permatex Automatic Transmission RTV Gasket Maker Not Available

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

* 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-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.

| 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)

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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | | | |
|-----------------------------------------------------|---------------------------------------------------------|------------------------------------------------|----------------|
| Appearance | Black paste with a mild odour; not miscible with water. | | |
| Physical state | Non Slump Paste | Relative density (Water = 1) | 1.36 |
| 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) | Not Available | Molecular weight (g/mol) | Not Applicable |
| Flash point (°C) | >93 (TCC) | Taste | Not Available |
| Evaporation rate | Not Applicable | 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) | <5 (by wt) |
| Vapour pressure (kPa) | <0.67 @ 27C | Gas group | Not Available |
| Solubility in water (g/L) | Immiscible | pH as a solution (1%) | Not Applicable |
| Vapour density (Air = 1) | 3.0 | VOC g/L | Not Available |

SECTION 10 STABILITY AND REACTIVITY

| | |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity | See section 7 |
| Chemical stability | <ul style="list-style-type: none"> ▶ Silicone fluids are stable under normal storage conditions. ▶ Hazardous polymerisation will not occur. ▶ At temperatures > 150 C, silicones can slowly react with the oxygen in air. ▶ When heated > 300 C, silicones can slowly depolymerise to volatile siloxanes whether or not air is present. |
| 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 | There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Not normally a hazard due to non-volatile nature of product |
| Ingestion | Accidental ingestion of the material may be damaging to the health of the individual. Smoothing the sealant with saliva wet finger may introduce sealant into the mouth. Safer alternates should replace this poor work practice. Small amounts may be highly irritating to sensitive mouth parts and in extreme cases produce small blisters but no toxic effects are known. |
| Skin Contact | There is some evidence to suggest that the material may cause moderate inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering. |

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| | Open cuts, abraded or irritated skin should not be exposed to this material Low molecular weight silicone fluids may exhibit solvent action and may produce skin irritation. Excessive use or prolonged contact may lead to defatting, drying and irritation of sensitive skin |
| Eye | This material can cause eye irritation and damage in some persons. |
| Chronic | There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. |

| Permatex Automatic Transmission RTV Gasket Maker | TOXICITY | IRRITATION |
|--------------------------------------------------|-----------------------------------------------------|------------------------------------|
| | Not Available | Not Available |
| dimethylsiloxane, hydroxy-terminated | TOXICITY | IRRITATION |
| | Dermal (rabbit) LD50: >15520 mg/kg ^[2] | Nil reported |
| | Inhalation (rat) LC50: >8.75 mg/L/7H ^[2] | |
| | Oral (rat) LD50: >5000 mg/kg*d ^[2] | |
| | Oral (rat) LD50: >62080 mg/kg ^[2] | |
| limestone | TOXICITY | IRRITATION |
| | dermal (rat) LD50: >2000 mg/kg ^[1] | Skin (rabbit): 500 mg/24h-moderate |
| | Oral (rat) LD50: >2000 mg/kg ^[1] | |
| silica amorphous, fumed | TOXICITY | IRRITATION |
| | Dermal (rabbit) LD50: >5000 mg/kg* ^[2] | Nil reported [Wacker] |
| | Oral (rat) LD50: >5000 mg/kg ^[2] | |
| polydimethylsiloxane | TOXICITY | IRRITATION |
| | Dermal (rabbit) LD50: >2000 mg/kg ^[2] | Eye (rabbit): 100 mg/1h - mild |
| | Oral (rat) LD50: >17000 mg/kg ^[2] | |
| vinyltris(methylethylketoxime)silane | TOXICITY | IRRITATION |
| | Not Available | Not Available |
| carbon black | TOXICITY | IRRITATION |
| | Dermal (rabbit) LD50: >3000 mg/kg ^[2] | Not Available |
| | Oral (rat) LD50: >8000 mg/kg ^[1] | |
| methyl ethyl ketoxime | TOXICITY | IRRITATION |
| | Dermal (rabbit) LD50: >184<2 mg/kg ^[1] | Eye (rabbit): 0.1 ml - SEVERE |
| | Inhalation (rat) LC50: 20 mg/l/4h ** ^[2] | |
| | TOXICITY | IRRITATION |
| | Oral (rat) LD50: >900 mg/kg ^[1] | |

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

| | |
|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Permatex Automatic Transmission RTV Gasket Maker | Siloxanes may impair liver and hormonal function, as well as the lung and kidney. They have not been found to be irritating to the skin and eyes. They may potentially cause cancer (tumours of the womb in females) and may cause impaired fertility or infertility. The following information refers to contact allergens as a group and may not be specific to this product. |
| DIMETHYLSILOXANE, HYDROXY-TERMINATED | Siloxanes may impair liver and hormonal function, as well as the lung and kidney. They have not been found to be irritating to the skin and eyes. They may potentially cause cancer (tumours of the womb in females) and may cause impaired fertility or infertility. * [Mobay Chemical Corp] **[GE] |

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| | |
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| LIMESTONE | <p>The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.</p> <p>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.</p> <p>Eye (rabbit) 0.75: mg/24h - No evidence of carcinogenic properties. No evidence of mutagenic or teratogenic effects.</p> |
| SILICA AMORPHOUS, FUMED | <p>For silica amorphous:</p> <p>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.</p> |
| POLYDIMETHYLSILOXANE | <p>Siloxanes may impair liver and hormonal function, as well as the lung and kidney. They have not been found to be irritating to the skin and eyes. They may potentially cause cancer (tumours of the womb in females) and may cause impaired fertility or infertility.</p> <p>The material may be irritating to the eye, with prolonged contact causing inflammation.</p> <p>No toxic response noted during 90 day subchronic inhalation toxicity studies The no observable effect level is 450 mg/m3. Non-irritating and non-sensitising in human patch test. [Xerox]*</p> |
| CARBON BLACK | <p>No significant acute toxicological data identified in literature search.</p> <p>WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.</p> <p>Inhalation (rat) TClO: 50 mg/m3/6h/90D-I Nil reported</p> |
| METHYL ETHYL KETOXIME | Mammalian lymphocyte mutagen *Huls Canada ** Merck |
| VINYLTRIS(METHYLETHYLKETOXIME)SILANE & METHYL ETHYL KETOXIME | <p>The following information refers to contact allergens as a group and may not be specific to this product.</p> <p>Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions.</p> |

| | | | |
|-----------------------------------|---|--------------------------|---|
| 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

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

For Siloxanes:

Environmental Fate: Siloxanes are used in cosmetics, wax, polishes, and to a minor extent in several other applications.

Atmospheric Fate: In the presence of nitrate ions, short chain siloxanes are broken down by sunlight to the level of silicate within days. The main source atmospheric siloxane release to the air is via evaporation.

Aquatic Fate: It is well accepted that polydimethylsiloxane fluids become permanent residents of sediment but should not have adverse environmental effects.

Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|-----------------------|-------------------------|------------------|
| methyl ethyl ketoxime | LOW | LOW |

Bioaccumulative potential

| Ingredient | Bioaccumulation |
|------------|-----------------|
|------------|-----------------|

Continued...

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| | |
|-----------------------|---------------|
| methyl ethyl ketoxime | LOW (BCF = 6) |
|-----------------------|---------------|

Mobility in soil

| Ingredient | Mobility |
|-----------------------|-------------------|
| methyl ethyl ketoxime | LOW (KOC = 130.8) |

SECTION 13 DISPOSAL CONSIDERATIONS**Waste treatment methods**

| Product / Packaging disposal | <ul style="list-style-type: none"> ▶ 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. |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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 | polydimethylsiloxane | Y |
| IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk | methyl ethyl ketoxime | Y |

SECTION 15 REGULATORY INFORMATION**Safety, health and environmental regulations / legislation specific for the substance or mixture****DIMETHYLSILOXANE, HYDROXY-TERMINATED(70131-67-8) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Inventory of Chemical Substances (AICS)

LIMESTONE(1317-65-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards

Australia Inventory of Chemical Substances (AICS)

SILICA AMORPHOUS, FUMED(68611-44-9) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Substances Information System - Consolidated Lists

Australia Inventory of Chemical Substances (AICS)

POLYDIMETHYLSILOXANE(63148-62-9) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Inventory of Chemical Substances (AICS)

VINYLTRIS(METHYLETHYLKETOXIME)SILANE(2224-33-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Inventory of Chemical Substances (AICS)

CARBON BLACK(1333-86-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards

Australia Inventory of Chemical Substances (AICS)

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

METHYL ETHYL KETOXIME(96-29-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Continued...

Permatex Automatic Transmission RTV Gasket Maker

Australia Hazardous Substances Information System - Consolidated Lists

Australia Inventory of Chemical Substances (AICS)

| National Inventory | Status |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Australia - AICS | Y |
| Canada - DSL | Y |
| Canada - NDSL | N (methyl ethyl ketoxime; dimethylsiloxane, hydroxy-terminated; polydimethylsiloxane; silica amorphous, fumed; carbon black; vinyltris(methylethylketoxime)silane) |
| China - IECSC | Y |
| Europe - EINEC / ELINCS / NLP | N (dimethylsiloxane, hydroxy-terminated; polydimethylsiloxane) |
| Japan - ENCS | Y |
| Korea - KECI | Y |
| New Zealand - NZIoC | Y |
| Philippines - PICCS | Y |
| USA - TSCA | Y |
| Legend: | Y = All ingredients are on the inventory 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

Ingredients with multiple cas numbers

| Name | CAS No |
|--------------------------------------|-------------------------------------|
| dimethylsiloxane, hydroxy-terminated | 63148-60-7, 70131-67-8 |
| silica amorphous, fumed | 112945-52-5, 60842-32-2, 68611-44-9 |

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

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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