Nulon L90 Extreme Pressure Anti-Seize Lubricant

Nulon Products Australia

Chemwatch: 41784
Version No: 8.1.1.1
Safety Data Sheet according to WHS and ADG requirements

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

Product Identifier

<table>
<thead>
<tr>
<th>Product name</th>
<th>Nulon L90 Extreme Pressure Anti-Seize Lubricant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms</td>
<td>lubricant L-90; Part No. L90</td>
</tr>
<tr>
<td>Other means of identification</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

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

- Relevant identified uses: Lubricant.

Details of the supplier of the safety data sheet

<table>
<thead>
<tr>
<th>Registered company name</th>
<th>Nulon Products Australia</th>
<th>Nulon Products NZ (Nulon NZ Ltd.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>17 Yulong Close Moorebank NSW 2170 Australia</td>
<td>80 Queen Street Auckland Central 1010 New Zealand</td>
</tr>
<tr>
<td>Telephone</td>
<td>+61 2 9608 7800</td>
<td>0800 454 108</td>
</tr>
<tr>
<td>Fax</td>
<td>+61 2 9601 4700</td>
<td>0800 547 080</td>
</tr>
<tr>
<td>Website</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:msds@nulon.com.au">msds@nulon.com.au</a></td>
<td>Not Available</td>
</tr>
</tbody>
</table>

Emergency telephone number

<table>
<thead>
<tr>
<th>Association / Organisation</th>
<th>Chemwatch 24hr.</th>
<th>Chemwatch 24hr.</th>
<th>CHEMWATCH EMERGENCY RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency telephone numbers</td>
<td>1800 039 008</td>
<td>+800 2436 2255</td>
<td>+61 1800 951 288</td>
</tr>
<tr>
<td>Other emergency telephone numbers</td>
<td>Not Available</td>
<td>Not Available</td>
<td>+61 2 9186 1132</td>
</tr>
</tbody>
</table>

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

- Poisons Schedule: Not Applicable
- Classification [1]: Specific target organ toxicity - single exposure Category 3 (narcotic effects)


Label elements

- Hazard pictogram(s)

| SIGNAL WORD | WARNING |

Hazard statement(s)

- H336 May cause drowsiness or dizziness.
Precautionary statement(s) Prevention

P271 Use only outdoors or in a well-ventilated area.

P261 Avoid breathing mist/vapours/spray.

Precautionary statement(s) Response

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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 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

<table>
<thead>
<tr>
<th>CAS No</th>
<th>% [weight]</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-65-0</td>
<td>30-60</td>
<td>paraffinic distillate, heavy, solvent-dewaxed (severe)</td>
</tr>
<tr>
<td>9002-84-0</td>
<td>1-10</td>
<td>polytetrafluoroethylene</td>
</tr>
<tr>
<td>Not Available</td>
<td>30-60</td>
<td>performance additives unregulated</td>
</tr>
<tr>
<td>Not Available</td>
<td></td>
<td>NOTE: Manufacturer has supplied full ingredient</td>
</tr>
<tr>
<td>Not Available</td>
<td></td>
<td>information to allow CHEMWATCH assessment.</td>
</tr>
</tbody>
</table>

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact
If this product comes in contact with the eyes:

- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Seek medical attention without delay; if pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin Contact
If skin or hair contact occurs:

- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

Inhalation
If fumes, aerosols or combustion products are inhaled remove from contaminated area.

- Other measures are usually unnecessary.

Ingestion
If swallowed do NOT induce vomiting.

- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- Observe the patient carefully.
- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
- Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
- Seek medical advice.

Indication of any immediate medical attention and special treatment needed

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. Treat symptomatically.

- Heavy and persistent skin contamination over many years may lead to dysplastic changes. Pre-existing skin disorders may be aggravated by exposure to this product.
- In general, emesis induction is unnecessary with high viscosity, low volatility products, i.e. most oils and greases.
- High pressure accidental injection through the skin should be assessed for possible incision, irrigation and/or debridement.

 NOTE: Injuries may not seem serious at first, but within a few hours tissue may become swollen, discoloured and extremely painful with extensive subcutaneous necrosis. Product may be forced through considerable distances along tissue planes.

SECTION 5 FIREFIGHTING MEASURES

paraffinic distillate, heavy, solvent-dewaxed (severe)
polytetrafluoroethylene
Extinguishing media
- Water spray or fog.
- Alcohol stable foam.
- 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.  
|              | Wear full body protective clothing with breathing apparatus.  
|              | Prevent, by any means available, spillage from entering drains or water course.  
|              | Use water delivered as a fine spray to control fire and cool adjacent area.  

| 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).  
|                       | Combustion products include:  
|                       | carbon dioxide (CO2)  
|                       | phosphorus oxides (POx)  
|                       | sulfur oxides (SOx)  
|                       | other pyrolysis products typical of burning organic material.  
|                       | May emit poisonous fumes.  

HAZCHEM | Not Applicable

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 | Slippery when spilt.  
|             | Remove all ignition sources.  
|             | Clean up all spills immediately.  
|             | Avoid breathing vapours and contact with skin and eyes.  
|             | Control personal contact with the substance, by using protective equipment.  

| Major Spills | Slippery when spilt.  
|             | Moderate hazard.  
|             | Clear area of personnel and move upwind.  
|             | Alert Fire Brigade and tell them location and nature of hazard.  
|             | Wear breathing apparatus plus protective gloves.  

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

| Safe handling | Containers, even those that have been emptied, may contain explosive vapours.  
|              | Do NOT cut, drill, grind, weld or perform similar operations on or near containers.  
|              | 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.  
|                  | No smoking, naked lights or ignition sources.  
|                  | Store in a cool, dry, well-ventilated area.  

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

CARE: Water in contact with heated material may cause foaming or a steam explosion with possible severe burns from wide scattering of hot material. Resultant overflow of containers may result in fire. For polytetrafluoroethylene (PTFE) and other related polyfluorinated polymers:

- Avoid storage with strong oxidising agents, tetrafluoroethylene, hexafluoroethylene, perfluoroisobutylene, carbonyl fluoride and hydrogen fluoride.

- Avoid reaction with oxidising agents

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

<table>
<thead>
<tr>
<th>Source</th>
<th>Ingredient</th>
<th>Material name</th>
<th>TWA</th>
<th>STEL</th>
<th>Peak</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia Exposure Standards</td>
<td>paraffinic distillate, heavy, solvent-dewaxed (severe)</td>
<td>Oil mist, refined mineral</td>
<td>5 mg/m3</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

EMERGENCY LIMITS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Material name</th>
<th>TEEL-1</th>
<th>TEEL-2</th>
<th>TEEL-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>paraffinic distillate, heavy, solvent-dewaxed (severe)</td>
<td>Pump oil; (petroleum distillates, solvent de-waxed heavy paraffinic</td>
<td>140 mg/m3</td>
<td>1,500 mg/m3</td>
<td>8,900 mg/m3</td>
</tr>
<tr>
<td>polytetrafluoroethylene</td>
<td>Polytetrafluoroethylene; (Teflon)</td>
<td>12 mg/m3</td>
<td>130 mg/m3</td>
<td>790 mg/m3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Original IDLH</th>
<th>Revised IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>paraffinic distillate, heavy, solvent-dewaxed (severe)</td>
<td>2,500 mg/m3</td>
<td>Not Available</td>
</tr>
<tr>
<td>polytetrafluoroethylene</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

Exposure controls

Appropriate engineering controls

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

- Process controls which involve changing the way a job activity or process is done to reduce the risk.
- Enclosure and/or isolation of emission source which keeps a selected hazard “physically” away from the worker and ventilation that strategically “adds” and “removes” air in the work environment.

Personal protection

Eye and face protection

- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.

Skin protection

See Hand protection below

Hands/feet protection

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 cannot 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.

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

Body protection

See Other protection below

Other protection

- Overalls.
- P.V.C. apron.
- Barrier cream.

Respiratory protection


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.

<table>
<thead>
<tr>
<th>Required Minimum Protection Factor</th>
<th>Half-Face Respirator</th>
<th>Full-Face Respirator</th>
<th>Powered Air Respirator</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 10 x ES</td>
<td>A-AUS P2</td>
<td>-</td>
<td>A-PAPR-AUS / Class 1 P2</td>
</tr>
</tbody>
</table>
SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Opaque viscous oily liquid with mineral oil odour; not miscible with water.</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odour</td>
<td>Not Available</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not Available</td>
</tr>
<tr>
<td>pH (as supplied)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Melting point / freezing point (°C)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range (°C)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Flash point (°C)</td>
<td>&gt;200</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not Available</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Upper Explosive Limit (% of air)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Lower Explosive Limit (% of air)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Vapour pressure (kPa)</td>
<td>Negligible</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Immiscible</td>
</tr>
<tr>
<td>Vapour density (Air = 1)</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

SECTION 10 STABILITY AND REACTIVITY

Reactivity: See section 7

Chemical stability:
- Unstable in the presence of incompatible materials.
- Product is considered stable.
- 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

Inhaled:
- Inhalation hazard is increased at higher temperatures.
- Not normally a hazard due to non-volatile nature of product.
- Inhalation of oil droplets or aerosols may cause discomfort and may produce chemical inflammation of the lungs.
- At temperatures of over 400 deg. C the polymer begins to decompose with the reaction becoming faster as temperature rises.
- Fumes from burning materials containing PTFE irritate the upper airway and may be harmful if exposure is prolonged.
- Overheated or burnt PTFE releases hydrogen fluoride (a highly irritating and corrosive gas) and small amounts of carbonyl fluoride (highly toxic).
- Inhaling high concentrations of mixed hydrocarbons can cause narcosis, with nausea, vomiting and lightheadedness. Low molecular weight (C2-C12) hydrocarbons can irritate mucous membranes and cause incoordination, giddiness, nausea, vertigo, confusion, headache, appetite loss, drowsiness, tremors and stupor.

Ingestion:
- Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733)
- Accidental ingestion of the material may be damaging to the health of the individual.
- Ingestion of petroleum hydrocarbons can irritate the pharynx, oesophagus, stomach and small intestine, and cause swellings and...
Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce IRRITATION. Skin: no adverse effect observed (not irritating) classifiable as to its carcinogenicity to humans.

Eye: no adverse effect observed (not irritating)

1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS.

**Nulon L90 Extreme Pressure Anti-Seize Lubricant**

<table>
<thead>
<tr>
<th>TOXICITY</th>
<th>IRRITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

**Paraffinic distillate, heavy, solvent-dewaxed (severe)**

<table>
<thead>
<tr>
<th>TOXICITY</th>
<th>IRRITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal (rabbit) LD50: &gt;2000 mg/kg(^2)</td>
<td>Eye: no adverse effect observed (not irritating)(^1)</td>
</tr>
<tr>
<td>Inhalation (rat) LC50: &gt;5.3 mg/l (^4) h(^1)</td>
<td>Skin: no adverse effect observed (not irritating)(^1)</td>
</tr>
<tr>
<td>Oral (rat) LD50: &gt;5000 mg/kg(^2)</td>
<td></td>
</tr>
</tbody>
</table>

**Polytetrafluoroethylene**

<table>
<thead>
<tr>
<th>TOXICITY</th>
<th>IRRITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral (rat) LD50: 1250 mg/kg(^2)</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

**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.

---

**PARAFFINIC DISTILLATE, HEAVY, SOLVENT-DEWAXED (SEVERE)**

No significant acute toxicological data identified in literature search. Animal studies indicate that normal, branched and cyclic paraffins are absorbed from the gastrointestinal tract and that the absorption of n-paraffins is inversely proportional to the carbon chain length, with little absorption above C30. With respect to the carbon chain lengths likely to be present in mineral oil, n-paraffins may be absorbed to a greater extent than iso- or cyclo-paraffins.

The major classes of hydrocarbons are well absorbed into the gastrointestinal tract in various species. In many cases, the hydrophobic hydrocarbons are ingested in association with fats in the diet. Some hydrocarbons may appear unchanged as in the lipoprotein particles in the gut lymph, but most hydrocarbons partly separate from fats and undergo metabolism in the gut cell.

The materials included in the Lubricating Base Oils category are related from both process and physical-chemical perspectives:

- The potential toxicity of a specific distillate base oil is inversely related to the severity or extent of processing the oil has undergone, since:
  - The adverse effects of these materials are associated with undesirable components, and
  - The levels of the undesirable components are inversely related to the degree of processing;
  - Distillate base oils receiving the same degree or extent of processing will have similar toxicities;
  - The potential toxicity of residual base oils is independent of the degree of processing the oil receives.
  - The reproductive and developmental toxicity of the distillate base oils is inversely related to the degree of processing.

Unrefined & mildly refined distillate base oils contain the highest levels of undesirable components, have the largest variation of hydrocarbon molecules and have shown the highest potential cancer-causing and mutation-causing activities. Highly and severely refined distillate base oils are produced from unrefined and mildly refined oils by removing or transforming undesirable components. In comparison to unrefined and mildly refined base oils, the highly and severely refined distillate base oils have a smaller range of hydrocarbon molecules and have demonstrated very low mammalian toxicity. Testing of residual oils for mutation-causing and cancer-causing potential has shown negative results, supporting the belief that these materials lack biologically active components or the components are largely non-bioavailable due to their molecular size.

Toxicity testing has consistently shown that lubricating base oils have low acute toxicities. For highly and severely refined distillate base oils:

- In animal studies, the acute, oral, semilethal dose is >5g/kg body weight and the semilethal dose by skin contact is >2g/kg body weight. The semilethal concentration for inhalation is 2.18 to 4 mg/L. The materials have varied from “non-irritating” to “moderately irritating” when tested for skin and eye irritation. Testing for sensitisation has been negative.

**POLYTFRAGLUOROEETHYLENE**

Perfluorinated compounds are potent peroxisome proliferators. The material may produce peroxisome proliferation. Peroxisomes are single, membrane limited organelles in the cytoplasm that are found in the cells of animals, plants, fungi, and protozoa.

**PARAFFINIC DISTILLATE, HEAVY, SOLVENT-DEWAXED (SEVERE) & POLYTFRAGLUOROEETHYLENE**

The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans.

Evidence of carcinogenicity may be inadequate or limited in animal testing.
Acute Toxicity ✗  Carcinogenicity ✗
Skin Irritation/Corrosion ✗  Reproductivity ✗
Serious Eye Damage/Irritation ✗  STOT - Single Exposure ✓
Respiratory or Skin sensitisation ✗  STOT - Repeated Exposure ✗
Mutagenicity ✗  Aspiration Hazard ✗

LEGEND: ✗ – Data either not available or does not fill the criteria for classification
 ✓ – Data available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

<table>
<thead>
<tr>
<th>ENDPOINT</th>
<th>TEST DURATION (HR)</th>
<th>SPECIES</th>
<th>VALUE</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nulon L90 Extreme Pressure Anti-Seize Lubricant</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>paraffinic distillate, heavy, solvent-dewaxed (severe)</td>
<td>LC50 96</td>
<td>Fish</td>
<td>&gt;100mg/L</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>EC50 48</td>
<td>Crustacea</td>
<td>&gt;10-mg/L</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>EC50 96</td>
<td>Algae or other aquatic plants</td>
<td>&gt;1000mg/L</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>NOEC 504</td>
<td>Crustacea</td>
<td>&gt;1mg/L</td>
<td>1</td>
</tr>
<tr>
<td>polytetrafluoroethylene</td>
<td>LC50 96</td>
<td>Fish</td>
<td>64.087mg/L</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EC50 96</td>
<td>Algae or other aquatic plants</td>
<td>248.438mg/L</td>
<td>3</td>
</tr>
</tbody>
</table>

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

DO NOT discharge into sewer or waterways.

Persistence and degradability

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Persistence: Water/Soil</th>
<th>Persistence: Air</th>
</tr>
</thead>
<tbody>
<tr>
<td>polytetrafluoroethylene</td>
<td>HIGH</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

Bioaccumulative potential

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Bioaccumulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>polytetrafluoroethylene</td>
<td>LOW (LogKOW = 1.2142)</td>
</tr>
</tbody>
</table>

Mobility in soil

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>polytetrafluoroethylene</td>
<td>LOW (KOC = 106.8)</td>
</tr>
</tbody>
</table>

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

- 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 or consult manufacturer for recycling options.
- Consult State Land Waste Authority for disposal.
- Bury or incinerate residue at an approved site.
- Recycle containers if possible, or dispose of in an authorised landfill.

SECTION 14 TRANSPORT INFORMATION

Labels Required
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 and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

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

PARAFFINIC DISTILLATE, HEAVY, SOLVENT-DEWAXED (SEVERE) IS FOUND ON THE FOLLOWING REGULATORY LISTS

- Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
- Australia Inventory of Chemical Substances (AICS)
- Chemical Footprint Project - Chemicals of High Concern List
- International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

POLYTETRAFLUOROETHYLENE IS FOUND ON THE FOLLOWING REGULATORY LISTS

- Australia Inventory of Chemical Substances (AICS)
- International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

National Inventory Status

<table>
<thead>
<tr>
<th>National Inventory</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia - AICS</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada - DSL</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada - NDSL</td>
<td>No (paraffinic distillate, heavy, solvent-dewaxed (severe); polytetrafluoroethylene)</td>
</tr>
<tr>
<td>China - IECSC</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe - EINEC / ELINCS / NLP</td>
<td>No (polytetrafluoroethylene)</td>
</tr>
<tr>
<td>Japan - ENCS</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea - KECI</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand - NZIoC</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines - PICCS</td>
<td>Yes</td>
</tr>
<tr>
<td>USA - TSCA</td>
<td>Yes</td>
</tr>
<tr>
<td>Taiwan - TCSI</td>
<td>Yes</td>
</tr>
<tr>
<td>Mexico - INSQ</td>
<td>Yes</td>
</tr>
<tr>
<td>Vietnam - NCI</td>
<td>Yes</td>
</tr>
<tr>
<td>Russia - ARIPS</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Legend:

- Yes = All CAS declared ingredients are on the inventory
- No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing (see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Revision Date 01/11/2019
Initial Date 01/11/2009

SDS Version Summary

<table>
<thead>
<tr>
<th>Version</th>
<th>Issue Date</th>
<th>Sections Updated</th>
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</thead>
<tbody>
<tr>
<td>7.1.1.1</td>
<td>13/03/2019</td>
<td>Expiration. Review and Update</td>
</tr>
<tr>
<td>8.1.1.1</td>
<td>01/11/2019</td>
<td>One-off system update. NOTE: This may or may not change the GHS classification</td>
</tr>
</tbody>
</table>

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
OSF: Odour Safety Factor
NOAEL: No Observed Adverse Effect Level
LOAEL: Lowest Observed Adverse Effect Level
TLV: Threshold Limit Value
LOD: Limit Of Detection
OTV: Odour Threshold Value
BCF: BioConcentration Factors
BEI: Biological Exposure Index

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