

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

<b>Product identifier</b>	: AFT-R671 LUBRICITY IMPROVER
<b>Other means of Identification</b>	: 32973
<b>Recommended use</b>	: Additive for petroleum fuels
<b>Restrictions on use</b>	: This material should not be used for any other purpose than that recommended without expert advice.
<b>Manufacturer or supplier's details</b>	: Apex Chemicals (S) Pte Ltd 132 Tuas South Avenue 2 West Point Bizhub Singapore 637171
<b>Emergency telephone number</b>	(65) 6483 5350 or Call Fire / SCDF 995

**SECTION 2. HAZARDS IDENTIFICATION**

**This material is considered to be hazardous according to regulations.**

**GHS-Classification**

Carcinogenicity: Category 2  
Specific target organ toxicity - single exposure: Category 3  
Aspiration hazard: Category 1  
Chronic aquatic toxicity: Category 2

**GHS Label elements, including precautionary statements**

Pictogram:

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Signal word: Danger

### Hazard statements:

- H304: May be fatal if swallowed and enters airways.
- H335: May cause respiratory irritation.
- H336: May cause drowsiness or dizziness.
- H351: Suspected of causing cancer.
- H411: Toxic to aquatic life with long lasting effects.

### Precautionary statements:

#### Prevention

- P201: Obtain special instructions before use.
- P202: Do not handle until all safety precautions have been read and understood.
- P261: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
- P271: Use only outdoors or in a well-ventilated area.
- P273: Avoid release to the environment.
- P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.

#### Response

- P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
- P304 + P340 + P312: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
- P308 + P313: IF exposed or concerned: Get medical advice/ attention.
- P331: Do NOT induce vomiting.
- P391: Collect spillage.

#### Storage

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

#### Disposal

- P501: Dispose of contents/ container to an approved waste disposal plant.

Contains: Heavy aromatic solvent, Naphthalene, 1,2,4-Trimethyl benzene

### Other hazards which do not result in classification

This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT) at  $\Rightarrow$  0.1%.

This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB) at  $\Rightarrow$  0.1%.



### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance / Mixture : Mixture**

**Hazardous components**

Component	CAS-No.	Concentration [%]	GHS-Classification
Heavy aromatic solvent	64742-94-5	>= 30 - < 50	STOT SE 3; H335, H336 Asp. Tox. 1; H304 Aquatic Chronic 2; H411
Naphthalene	91-20-3	>= 1 - < 5	Flam. Sol. 2; H228 Carc. 2; H351 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Acute Tox. 4; H302
1,2,4-Trimethyl benzene	95-63-6	>= 1 - < 5	STOT SE 3; H335 Aquatic Chronic 2; H411 Flam. Liq. 3; H226 Asp. Tox. 1; H304 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

All concentrations are weight percent units for liquids or volume percent units for gaseous products.

Other ingredients are either not hazardous or are below the regulatory disclosure limit..

### SECTION 4. FIRST AID MEASURES

**Description of first aid measures**

- General advice** : Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.  
Symptoms of poisoning may appear several hours later.
- If inhaled** : Consult a physician after significant exposure.  
If unconscious, place in recovery position and seek medical advice.  
Keep respiratory tract clear.
- In case of skin contact** : Take off contaminated clothing and shoes immediately.  
Wash off with soap and plenty of water.  
If symptoms persist, call a physician.
- In case of eye contact** : Flush eyes with water as a precaution.  
Remove contact lenses.  
Protect unharmed eye.



Keep eye wide open while rinsing.  
If eye irritation persists: Get medical advice/ attention.

**If swallowed** : Clean mouth with water and drink afterwards plenty of water.  
Do NOT induce vomiting.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
Take victim immediately to hospital.

#### Most important symptoms and effects, both acute and delayed

Symptoms : irritant effects  
Dizziness  
Cancer  
Dermatitis  
Tiredness

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

Treatment : Show this safety data sheet to the doctor in attendance.  
The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.  
If a person vomits when lying on his back, place him in the recovery position.  
Do not induce vomiting: contains petroleum distillates and/or aromatic solvents.  
Keep patient warm and at rest.

**Protection of first-aiders** : For personal protection see section 8.

### SECTION 5. FIREFIGHTING MEASURES

#### Extinguishing media

**Suitable extinguishing media** : Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames

**Unsuitable extinguishing media** : High volume water jet

#### Special hazards arising from the substance or mixture

Combustibility : Combustible.

Hazardous combustion products : Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

Flammable properties : See Section 9 for information on flammability.

**Special protective actions for fire-fighters**

**Protective equipment and precautions for firefighters** : In the event of fire, wear self-contained breathing apparatus. Exposure to decomposition products may be a hazard to health.

**Fire Fighting Instructions** : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. In the event of fire and/or explosion do not breathe fumes. Use a water spray to cool fully closed containers.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures** : Advice for emergency responders  
Ensure adequate ventilation.  
Use personal protective equipment.  
Material can create slippery conditions.  
For personal protection see section 8.

Advice for non-emergency personnel  
Avoid contact with spilled material. Do not touch or walk through spilled material.

**Environmental precautions** : Prevent entry into waterways, sewers, basements or confined areas.  
  
Local authorities should be advised if significant spillages cannot be contained.  
Do not flush into surface water or sanitary sewer system.  
Prevent further leakage or spillage if safe to do so.  
Retain and dispose of contaminated wash water.  
Try to prevent the material from entering drains or water courses.  
If the product contaminates rivers and lakes or drains inform respective authorities.

**Methods and materials for containment and cleaning up** : Prevent further leakage or spillage if safe to do so.  
Large Spills: Dyke far ahead of liquid spill for later recovery and disposal.  
Recover by pumping or with suitable absorbent

Report spills as required to appropriate authorities.  
Seek the advice of a specialist before using dispersants.

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Dispose of according to local regulations.  
In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.  
Material will float on water, use containment booms as a barrier to protect shorelines.

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).  
Keep in suitable, closed containers for disposal.  
Clean contaminated floors and objects thoroughly while observing environmental regulations.

### Reference to other sections

**Other information** : For personal protection see section 8.  
See section 13

## SECTION 7. HANDLING AND STORAGE

### Precautions for safe handling

Avoid formation of aerosol.  
Do not breathe vapours or spray mist.  
Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Take precautionary measures against static discharges.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Dispose of rinse water in accordance with local and national regulations.  
Ensure all equipment is electrically grounded before beginning transfer operations.  
Handle and open container with care.

Do not spray on a naked flame or any incandescent material.  
Keep away from open flames, hot surfaces and sources of ignition.

Loading/unloading temperature : 0 °C (32 ° F) - 40 °C (104 ° F)

Viscosity @ Loading/unloading temperature : 6 cSt - 33 cSt

Static accumulator : This material is a static accumulator.

### Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

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Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Observe label precautions.

No decomposition if stored and applied as directed.

Storage temperature : 0 °C (32 ° F) - 40 °C (104 ° F)

Incompatible materials and coatings : Natural Rubber, butyl-rubber, Nitrile rubber, Styrene Rubber, Plastic container of HDPE, Silicone Rubber, Ethylene-propylene-diene monomer (EPDM), Polyethylene, Chlorosulfonated Polyethylene, Neoprene

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Control parameters / Occupational Exposure Limits

Substance name					
Form	Limit / Standard			Note	Source
<b>Heavy aromatic solvent</b>					
	TWA	17 ppm	100 mg/m <sup>3</sup>		Supplier
<b>Naphthalene</b>					
	PEL (long term)	10 ppm	52 mg/m <sup>3</sup>		SG OEL
	PEL (short term)	15 ppm	79 mg/m <sup>3</sup>		SG OEL
	TWA	10 ppm		hemolytic anemia, URT irr, cataract, A3, Skin	ACGIH
	STEL	15 ppm		hematologic eff, URT irr, eye irr, eye dam, ( ), (NIC), A4, Skin	ACGIH
<b>1,2,4-Trimethyl benzene</b>					
		25 ppm	123 mg/m <sup>3</sup>		SG PEL

Exposure limits for materials that can be formed when handling this product: When mists/aerosols can occur, the following are recommended: 5mg/m<sup>3</sup> - ACGIH TLV, 10 mg/m<sup>3</sup> - ACGIH STEL

Limits/standards shown for guidance only. Follow applicable regulations.

## Occupational exposure controls

Appropriate engineering controls : No special requirements under ordinary conditions of use and with adequate ventilation.

## Individual protection measures, such as personal protective equipment

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- Respiratory protection : In the case of vapour formation use a respirator with an approved filter.
- Hand protection : Solvent-resistant gloves  
Before removing gloves clean them with soap and water.  
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
- Eye/face protection : Eye wash bottle with pure water  
Tightly fitting safety goggles  
Ensure that eyewash stations and safety showers are close to the workstation location.
- Skin and body protection : Impervious clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

### Advice on general occupational hygiene

- Hygiene measures : When using do not eat or drink.  
When using do not smoke.  
Wash hands before breaks and immediately after handling the product.  
Remove contaminated clothing and protective equipment before entering eating areas.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Typical physical and chemical properties are given below. Consult the Supplier in Section 1 for additional data.

### Information on basic physical and chemical properties

- Physical state : liquid
- Form : liquid
- Colour : light yellow
- Odour : aromatic
- Odour Threshold : not determined

### Important health safety and environmental information

- Relative density : not determined
- Bulk density : Not applicable
- Density : 0.929 g/cm<sup>3</sup> at 15 °C (59 ° F)  
Method: ASTM D4052

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Flash point	: 62 °C (144 ° F) Method: Pensky-Martens Closed Cup (ASTM D93)
Flammability (solid, gas)	: not determined
Lower flammability limit	: not determined
Upper flammability limit	: not determined
Auto-ignition temperature	: Not applicable
Initial boiling point and boiling range	: not determined
Vapour density (Air = 1.0)	: not determined
Vapour pressure	: 0.1 hPa (0.1 mmHg) at 20 °C (68 ° F)
Evaporation rate (N-butyl acetate=1)	: Not applicable
pH	: Not applicable
Partition coefficient: n-octanol/water	: not determined
Water solubility	: < 0.0001 g/l estimated
Viscosity, kinematic	: 12.2 mm <sup>2</sup> /s at 20 °C (68 ° F) Method: ASTM D 445 6 mm <sup>2</sup> /s at 40 °C (104 ° F) Method: ASTM D 445
Explosive properties	: not determined
Oxidizing properties	: See sections 3, 15
Decomposition temperature	: not determined
Melting point/freezing point	: not determined
Pour point	: -48 °C (-54 ° F) Method: ASTM D97

### Other information

DMSO extract by IP346	: Not applicable (mineral oil component only)
Coefficient of thermal expansion	: 0.00089 1/°C ITM 50-020



### SECTION 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	: No dangerous reaction known under conditions of normal use.
<b>Chemical stability</b>	: Stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	: Vapours may form explosive mixture with air.
<b>Conditions to avoid</b>	: Avoid heat, sparks, open flames and other ignition sources.
<b>Incompatible materials</b>	: Strong oxidizing agents
<b>Hazardous decomposition products</b>	: No decomposition if used as directed.

### SECTION 11. TOXICOLOGICAL INFORMATION

#### Information on toxicological effects

##### Product

Acute oral toxicity	: No data is available on the product itself.
Acute inhalation toxicity	: No data is available on the product itself.
Acute dermal toxicity	: No data is available on the product itself.
Skin corrosion/irritation	: No data is available on the product itself.
Serious eye damage/eye irritation	: No data is available on the product itself.
Respiratory or skin sensitisation	: No data is available on the product itself.
Germ cell mutagenicity	
Genotoxicity in vitro	: No data is available on the product itself.
Genotoxicity in vivo	: No data is available on the product itself.
Carcinogenicity	: Suspected of causing cancer.
Reproductive toxicity	: No data is available on the product itself.
STOT - single exposure	: Assessment: No data is available on the product itself.
STOT - repeated exposure	: Assessment: No data is available on the product itself.
Aspiration toxicity	: No data is available on the product itself.

##### Components:

**Heavy aromatic solvent:**

- Acute oral toxicity : LD50 Rat: > 5,000 mg/kg  
Method: OECD Test Guideline 401  
Test substance: yes  
Remarks: Based on available data, the classification criteria are not met.
- Acute inhalation toxicity : LC50 Rat: > 4.688 mg/l  
Exposure time: 4 h  
vapour  
Method: OECD Test Guideline 403  
Test substance: yes  
  
Based on available data, the classification criteria are not met.
- Acute dermal toxicity : LD50 Rat: > 2,000 mg/kg  
Method: OECD Test Guideline 402  
Test substance: yes  
Remarks: Based on available data, the classification criteria are not met.
- Skin corrosion/irritation : Species: Rabbit  
Result: No skin irritation  
Method: OECD Test Guideline 404  
Test substance: yes  
Based on available data, the classification criteria are not met.
- Serious eye damage/eye irritation : Species: Rabbit  
Result: No eye irritation  
Method: OECD Test Guideline 405  
Test substance: yes  
Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation : Test Method: Maximisation Test  
Species: Guinea pig  
Result: Does not cause skin sensitisation.  
Method: OECD Test Guideline 406  
Test substance: yes  
Based on available data, the classification criteria are not met.
- Germ cell mutagenicity
- Genotoxicity in vitro : Result: negative  
Test substance: yes  
Based on available data, the classification criteria are not met.
- Genotoxicity in vivo : Test species: Rat, Bone marrow  
Application Route: inhalation (vapour)  
Test substance: yes  
Result: negative  
Based on available data, the classification criteria are not met.
- Carcinogenicity : No data available
- Reproductive toxicity : Test substance: Read-across (Analogy)  
Based on available data, the classification criteria are not met.

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- STOT - single exposure : Remarks: May cause drowsiness or dizziness.
- STOT - repeated exposure : Remarks: Based on available data, the classification criteria are not met.
- Aspiration toxicity : May be fatal if swallowed and enters airways.

### **Naphthalene:**

- Carcinogenicity : Species: Rat  
Application Route: inhalation (vapour)  
Test substance: yes  
Suspected of causing cancer., NAPHTHALENE: Exposure to high concentrations of naphthalene may cause destruction of red blood cells, anemia, and cataracts. Naphthalene caused cancer in laboratory animal studies, but the relevance of these findings to humans is uncertain.

## SECTION 12. ECOLOGICAL INFORMATION

### **Ecotoxicity**

#### **Product:**

- Toxicity to fish : No data is available on the product itself.
- Toxicity to daphnia and other aquatic invertebrates : No data is available on the product itself.
- Toxicity to algae : No data is available on the product itself.

#### **Components:**

#### **Heavy aromatic solvent:**

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2 - 5 mg/l  
Exposure time: 96 h  
Test Method: semi-static test  
Test substance: yes  
Method: OECD Test Guideline 203  
Toxic to aquatic life.
- Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 3 - 10 mg/l  
Exposure time: 48 h  
Test Method: static test  
Test substance: yes  
Method: OECD Test Guideline 202  
Toxic to aquatic life.
- Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 11 mg/l  
Exposure time: 72 h



Test Method: static test  
Test substance: yes  
Method: OECD Test Guideline 201  
Harmful to aquatic life.

**Persistence and degradability****Product:**

Biodegradability : No data is available on the product itself.

**Components:****Heavy aromatic solvent:**

Biodegradability : aerobic  
activated sludge  
Result: Inherently biodegradable.  
Biodegradation: 57.95 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301F  
Test substance: yes  
According to the results of tests of biodegradability this product is not readily biodegradable.

**Bioaccumulative potential****Product:**

Bioaccumulation : No data is available on the product itself.

Partition coefficient: n-octanol/water : not determined

**Components:****Heavy aromatic solvent:**

Bioaccumulation : study scientifically unjustified

Partition coefficient: n-octanol/water : No data available

**Mobility in soil****Product:**

Mobility : No data is available on the product itself.

**Components:****Heavy aromatic solvent:**

Mobility : After release, adsorbs onto soil.

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### Results of PBT and vPvB assessment

#### Product:

Assessment : No data is available on the product itself.

#### Components:

#### Heavy aromatic solvent:

Assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT)., This substance is not considered to be very persistent and very bioaccumulating (vPvB).

### Other adverse effects

#### Product:

Additional ecological information : Test data on the whole aromatic solvent overrides the calculated contribution of naphthalene.

## SECTION 13. DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied, Disposal must be in accordance with applicable laws and regulations, and material characteristics at time of disposal

For the safety of persons conducting disposal, recycling or reclamation activities, refer to the information in Section 8, Exposure control and personal protection.

#### Disposal methods

Product : The product should not be allowed to enter drains, water courses or the soil.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Dispose of contents/ container to an approved waste disposal plant.

#### Empty containers.

Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

## SECTION 14. TRANSPORT INFORMATION

### LAND (ADR)

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Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Heavy aromatic solvent)

Class	9
UN number	UN3082
Packing group	III
Labels	9
Hazard Identification Number	90
Hazchem Code	.3Z
Environmentally hazardous	yes

### SEA (IMDG)

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Heavy aromatic solvent)

Class	9
UN number	UN3082
Packing group	III
Labels	9
EmS Number 1	F-A
EmS Number 2	S-F
Marine pollutant	yes

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

Remarks	Not applicable
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### AIR (IATA)

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Heavy aromatic solvent)

Class	9
UN number	UN3082
Packing group	III
Labels	9

### Special precautions for user

For personal protection see section 8.  
No special precautions required.  
Transport Emergency Information Panel is needed for Dangerous Goods moved via Bulk Liquid Containers / vehicles.

## SECTION 15. REGULATORY INFORMATION

### Safety, health and environmental regulations specific for the product in question

#### Workplace Safety and Health Act and Workplace Safety and Health (General Provisions) Regulations.

This product is subjected to the SDS, labelling and other requirements of this regulation.



**Maritime and Port Authority of Singapore (Dangerous Goods, Petroleum and Explosives) Regulations.**

This product is subjected to the requirements of this regulation.  
See section 14

**Environmental Protection and Management Act and Environmental Protection and Management (Hazardous Substances) Regulations**

Not applicable

**Fire Safety Act and Fire Safety (Petroleum and Flammable Material) Regulation**

Not applicable

**National chemical inventory status:**

<b>List</b>	<b>Status</b>
USA, Active TSCA Inventory	: On the inventory, or in compliance with the inventory
Canada, DSL Inventory	: On the inventory, or in compliance with the inventory
Australia, AIIIC	: On the inventory, or in compliance with the inventory
New Zealand, NZIoC	: On the inventory, or in compliance with the inventory
Japan, ENCS	: On the inventory, or in compliance with the inventory
Korea, KECI	: On the inventory, or in compliance with the inventory
Philippines, PICCS	: On the inventory, or in compliance with the inventory
China, IECSC	: On the inventory, or in compliance with the inventory
Taiwan, TCSI	: On the inventory, or in compliance with the inventory

To import this product into Korea, your company requires registrations and/or pre-registrations updates for all constituent substances that are subject to K-REACH registration.

To import this product into the EU your company requires registrations for all constituent substances that are subject to REACH registration.

**SECTION 16. OTHER INFORMATION**



**Key to the H-statements contained in sections 2 and 3 of this document.**

H226	Flammable liquid and vapour.
H228	Flammable solid.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Revision changes since the previous version are marked in the margins throughout this document

**Sources of key data used to compile the Safety Data Sheet:**

International Agency for Research on Cancer  
 International Air Transport Association: Dangerous Goods Regulations.  
 International Maritime Organization: International Maritime Dangerous Goods Code  
 Component supplier data  
 SS586:2014 Singapore Standard on hazard communication for hazardous chemicals and dangerous goods

**Key or legend to abbreviations and acronyms used in the safety data sheet**

DSL	: Domestic Substances List (DSL)
NDSL	: Non-Domestic Substances List (NDSL)
PICCS	: Inventory of Chemicals and Chemical Substances (PICCS)
TSCA	: TSCA Inventory
AIIC	: Australian Inventory of Industrial Chemicals (AIIC)
IECSC	: China. Inventory of Existing Chemical Substances in China (IECSC)
ENCS	: Japan. ENCS - Existing and New Chemical Substances Inventory
KECI	: Korea. Korean Existing Chemicals Inventory (KECI)
NZIoC	: New Zealand. Inventory of Chemical Substances
EINECS	: European Inventory of Existing Commercial Chemical Substances (EINECS)
ELINCS	: European List of Notified Commercial Substances (ELINCS)
ATE	: Acute toxicity estimate
STEL	: Short term exposure limit
TWA	: Time weighted average
LC50	: Lethal Concentration to 50 % of a test population
LD50	: Lethal Dose to 50% of a test population (Median Lethal Dose)
PPE	: Personal Protection Equipment

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