SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

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

1.1 Product identifier

Product name: **PETROL SYSTEM CLEANER**

1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses:

Aftermarket Gasoline

Uses advised against: None identified.

1.3 Details of the supplier of the safety data sheet

Supplier

Company Name: MARINE 16 LIMITED
Address: ALDERTON 2
PRIORY PARK
TETBURY
GLOUCESTERSHIRE, GL8 8HZ

Telephone: (44) 01666 817 577
E-mail contact: info@marine16.co.uk

1.4 Emergency telephone number:

FOR TRANSPORT EMERGENCY CALL 01666 817 577

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified according to the legislation in force.

Classification according to Regulation (EC) No 1272/2008 as amended.

Skin irritation	Category 2	H315: Causes skin irritation. Serious
eye irritation	Category 2	H319: Causes serious eye irritation.
Aspiration Hazard	Category 1	H304: May be fatal if swallowed and enters airways.
Acute hazards to the aquatic	Category 1	H400: Very toxic to aquatic life.
Chronic hazards to the aquatic environment	Category 1	H410: Very toxic to aquatic life with long lasting effects.

The full text for all H-phrases is displayed in section 16.

2.2 Label elements according to Regulation (EC) No 1272/2008 as amended

Signal Words: Danger

Hazard Statement(s):
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H410: Very toxic to aquatic life with long lasting effects.

Precautionary Statement

Prevention:
P264: Wash hands thoroughly after handling.

Response:
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331: Do NOT induce vomiting.
P332+P313: If skin irritation occurs: Get medical advice/attention.
P362+P364: Take off contaminated clothing and wash it before reuse.
P337+P313: If eye irritation persists: Get medical advice/attention.
P391: Collect spillage.

Storage:
P405: Store locked up.

Disposal:
P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Supplemental label information
EUH066: Repeated exposure may cause skin dryness or cracking.

Components for Label Disclosure:

Chemical name	EC No.
Poly[oxy(1,2-propanediyl)], .alpha.-(3-aminopropyl)-.omega.-hydroxy-, C12-15 alkyl ethers	Polymer
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, less then 2% aromatics	926-141-6
Hydrocarbons, C10, aromatics, >1% naphthalene	919-284-0
Poly[oxy(1,2-propanediyl)].alpha.-propyl-.omega.-hydroxy-C12-15 alkyl ethers	Polymer

2.3 Other hazards: None identified.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Regulation No. 1272/2008.

Chemical name	Concentration	EC No.	REACH Registration No.	M-Factor:	Notes
Poly[oxy(1,2-propanediyl)], .alpha.-(3-aminopropyl)-.omega.-hydroxy-, C12-15 alkyl ethers	32.88 - 36.18%	Polymer			
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, less then 2% aromatics	20 - 50%	926-141-6			
Distillates (petroleum), hydrotreated middle	10 - 20%	265-148-2	01-2119489867-12		
Phenol, (dimethylamino)methyl-, polyisobutylene derivs.	5 - 10%	Polymer			
Hydrocarbons, C10, aromatics, >1% naphthalene	1 - 2.5%	919-284-0	01-2119463588-24		
Poly[oxy(1,2-propanediyl)].alpha.-propyl-.omega.-hydroxy-C12-15 alkyl ethers	1 - 3%	Polymer			

++ Naphthalene	0.1 - 0.25%	202-049-5			#

This substance has workplace exposure limit(s).
600, 700 and 900 ECHA List Numbers do not have any legal significance; rather they are purely technical identifiers and are displayed for informational purposes only.
++ The listed components are subcomponents of the hazardous ingredients listed above.

Classification Regulation No. 1272/2008.

Chemical name	Classification	Notes
Poly[oxy(1,2-propanediyl)], .alpha.-(3-aminopropyl)-.omega.-hydroxy-, C12-15 alkyl ethers	Eye Dam. 1; H318 Skin Corr. 2; H315 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, less then 2% aromatics	Asp. Tox. 1; H304 Flam. Liq. 3; H226	
Distillates (petroleum), hydrotreated middle	Acute Tox. 4; H332 Asp. Tox. 1; H304 Skin Corr. 2; H315 Aquatic Chronic 2; H411 Flam. Liq. 3; H226	
Phenol, (dimethylamino)methyl-, polyisobutylene derivs.	Aquatic Chronic 3; H412	
Hydrocarbons, C10, aromatics, >1% naphthalene	Asp. Tox. 1; H304 Aquatic Chronic 2; H411 STOT SE 3; H336 Flam. Liq. 3; H226	
Poly[oxy(1,2-propanediyl)].alpha.-propyl-.omega.-hydroxy-C12-15 alkyl ethers	Eye Dam. 1; H318 Skin Corr. 2; H315	
Naphthalene	Carc. 2; H351 Acute Tox. 4; H302 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Flam. Sol. 2; H228	

The full text for all H-phrases is displayed in section 16.

See Section 15 for Regulation (EC) No. 1907/2006 REACH Article 59(1). Candidate List (Substances of Very High Concern (SVHC))

SECTION 4: First aid measures

General: IF exposed or concerned: Get medical advice/attention.

4.1 Description of first aid measures

Inhalation: Remove exposed person to fresh air if adverse effects are observed.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE/doctor/…

Skin Contact: Take off contaminated clothing and wash before re-use. Wash skin thoroughly with soap and water. If skin irritation occurs, get medical attention. Launder contaminated clothing before reuse.

Ingestion: Do NOT induce vomiting. Aspiration of material due to vomiting can cause chemical pneumonitis which can be fatal. If vomiting occurs naturally, the casualty should lean forward to reduce the risk of aspiration. Rinse mouth. Immediately call a POISON CENTRE/doctor/…

4.2 Most important symptoms and effects, both acute and delayed:

Symptoms may be delayed.

4.3 Indication of any immediate medical attention and special treatment needed

Hazards: No data available.

Treatment: Treat symptomatically.

SECTION 5: Firefighting measures

General Fire Hazards: Move containers from fire area if you can do so without risk.

5.1 Extinguishing media

Suitable extinguishing media: CO_2, Dry chemical or Foam. Water can be used to cool and protect exposed material.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

5.2 Special hazards arising from the substance or mixture: Vapours may cause a flash fire or ignite explosively. Prevent buildup of vapours or gases to explosive concentrations. Vapours may travel considerable distance to a source of ignition and flash back. Water may cause splattering. Container may rupture on heating. A solid stream of water will spread the burning material. Material creates a special hazard because it floats on water. See section 10 for additional information.

5.3 Advice for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away. See Section 8 of the SDS for Personal Protective Equipment. Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations.

6.2 Environmental Precautions: Avoid release to the environment. Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

6.3 Methods and material for containment and cleaning up: Eliminate all ignition sources if safe to do so. Dike far ahead of larger spill for later recovery and disposal. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas.

6.4 Reference to other sections: See sections 8 and 13 for additional information.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling: Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not get in eyes. Avoid contact with skin. Observe good industrial hygiene practices. Provide adequate ventilation. Use personal protective equipment as required. Wash hands thoroughly after handling. Launder contaminated clothing before reuse. Avoid environmental contamination.

Maximum Handling Temperature: Not determined.

7.2 Conditions for safe storage, including any incompatibilities: Keep cool. Store in a well-ventilated place. Store away from incompatible materials. See section 10 for incompatible materials. Do not store near potential sources of ignition.

Maximum Storage Temperature: Not determined.

7.3 Specific end use(s): End uses are listed in an attached exposure scenario when one is required.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical name	type	Exposure Limit Values		Source
++ Naphthalene	TWA	10 ppm	50 mg/m3	EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU (12 2009)

Biological Limit Values

Chemical name	Exposure Limit Values	Source
++ Naphthalene (1-Hydroxypyrene: Sampling time: End of shift.)	4 µmol/mol (Creatinine in urine)	UKEH40BMGV (12 2011)

8.2 Exposure controls

Appropriate engineering controls: Material should be handled in enclosed vessels and equipment, in which case general (mechanical) room ventilation should be sufficient. Local exhaust ventilation should be used at points where dust, mist, vapors or gases can escape into the room air.

Individual protection measures, such as personal protective equipment

General information: Please follow the recommended personal protective equipment (PPE) guidelines below and refer to the appropriate EN standard where applicable. Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Eye/face protection: Wear tight-fitting goggles or face shield. Eye protection should meet the standards set out in EN 166.

Skin protection

Hand Protection: Use nitrile or neoprene gloves. Use good industrial hygiene practices. In case of skin contact, wash hands and arms with soap and water.

General: Because specific work environments and material handling practices vary, safety procedures should be specific for each intended application. The correct choice of protective gloves depends upon the chemicals being handled, and the conditions of work and use. Most gloves provide protection for only a limited time before they must be discarded and replaced (even the best chemically resistant gloves will break down after repeated chemical exposures). Gloves should be chosen in consultation with the supplier / manufacturer and taking account of a full assessment of the working conditions. For typical use and handling of chemical substances, gloves should meet the standards set out in EN 374. For applications involving mechanical risks with potential for abrasion or puncture, the standards set out in EN 388 should be considered. For tasks involving thermal hazards, the standards set out in EN 407 should be considered.

Break-through time: Breakthrough time data are generated by glove manufacturers under laboratory test conditions and represent how long a glove can be expected to provide effective permeation resistance. It is important when following breakthrough time recommendations that actual workplace conditions are taken into account. Always consult with your glove supplier for up-to-date technical information on breakthrough times for the recommended glove type.
For continuous contact, we suggest gloves with a minimum breakthrough time of 240 minutes, or > 480 minutes if suitable gloves can be obtained. If suitable gloves are not available to offer that level of protection, gloves with shorter breakthrough times may be acceptable as long as appropriate glove maintenance and replacement regimes are determined and adhered to. For short-term, transient exposures and splash protection, gloves with shorter breakthrough times may commonly be used. Therefore, appropriate maintenance and replacement regimes must be determined and rigorously followed.

Glove thickness: For general applications, we recommend gloves with a thickness typically greater than 0.35 mm.
It is important to note that glove thickness is not the only predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times.
Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers' technical data should always be taken into account to ensure selection of the most appropriate glove for the task.
Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example: Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, before being disposed of. Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential.

Other: Wear apron or protective clothing in case of contact. Do not wear rings, watches or similar apparel that could entrap the material.

Respiratory Protection:	Use respirator with an organic vapor cartridge if exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator. Under normal use conditions, respirator is not usually required. Use appropriate respiratory protection if exposure to dust particles, mist or vapors is likely. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites. Respiratory Protective Equipment (RPE) is not normally required where there is adequate natural or local exhaust ventilation to control exposure. In case of insufficient ventilation, wear suitable respiratory equipment. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions. Please refer to the relevant EN standards for the RPE selected.
Hygiene measures:	Observe good industrial hygiene practices. Do not get in eyes. Avoid contact with skin. Wash contaminated clothing before reuse. When using do not smoke. Wash hands before breaks and immediately after handling the product.
Environmental Controls:	No data available. See section 6 for details.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	
Physical state:	liquid
Form:	liquid
Colour:	Light yellow
Odour:	Slight amine
Odour Threshold:	No data available.
pH:	No data available.
Freezing point:	No data available.
Boiling Point:	No data available.
Flash Point:	74 °C (Pensky-Martens Closed Cup)
Evaporation Rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability Limit - Upper (%):	No data available.
Flammability Limit - Lower (%):	No data available.
Vapour pressure:	No data available.
Vapour density (air=1):	No data available.
Relative density:	0.865 - 0.905 (15.6 °C)

Solubility(ies)

Solubility in Water:	Insoluble in water
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Autoignition Temperature:	No data available.
Decomposition Temperature:	No data available.
Viscosity:	12.5 mm2/s (40 °C); 20 mm2/s (25 °C)
Explosive properties:	No data available.
Oxidizing properties:	No data available.
VOC Content:	No data available.

Other information

Pour Point Temperature:	-27 °C

SECTION 10: Stability and reactivity

10.1 Reactivity:	No data available.
10.2 Chemical Stability:	Material is stable under normal conditions.
10.3 Possibility of hazardous reactions:	Will not occur.
10.4 Conditions to avoid:	Heat, sparks, flames. Do not expose to excessive heat, ignition sources, or oxidizing materials.
10.5 Incompatible Materials:	Strong acids. Strong oxidizing agents.
10.6 Hazardous Decomposition Products:	Ammonia. Propylamine, polyalkylglycols, and aliphatic alcohols may also be released. Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon dioxide, and other products of incomplete combustion.

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation:	No data available.
Ingestion:	No data available.
Skin Contact:	Causes skin irritation.
Eye contact:	Causes serious eye irritation.

11.1 Information on toxicological effects

Acute toxicity

Oral

Product**:** Swallowing this material causes irritation of mouth, esophagus and stomach, with nausea, vomiting, diarrhoea and abdominal pain. Swallowing material may cause irritation of the gastrointestinal lining, nausea, vomiting, diarrhoea, and abdominal pain. Ingestion can cause central nervous system effects such as headache, dizziness, drowsiness, and generalized weakness.
Not classified for acute toxicity based on available data.

Dermal

Product:	Not classified for acute toxicity based on available data.

Inhalation

Product:	High concentrations may cause headaches, dizziness, nausea, behavioural changes, weakness, drowsiness and stupor. Repeated overexposure to petroleum naphtha can cause nervous system damage. High concentrations may cause headaches, dizziness, weakness, and nausea. ATEmix (, 4 h): >5 mg/l. Dusts, mists and fumes

Skin Corrosion/Irritation:

Product:	Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin. Remarks: Causes skin irritation.

Serious Eye Damage/Eye Irritation:

Product:	Remarks: Causes serious eye irritation.

Respiratory sensitization:

No data available

Skin sensitization:

Poly[oxy(1,2-propanediyl)], .alpha.-(3-aminopropyl)-.omega.-hydroxy-, C12-15 alkyl ethers	Classification: Not a skin sensitizer. (Read across) Not a skin sensitizer.
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, less then 2% aromatics	Classification: Not a skin sensitizer. (Literature)
Hydrocarbons, C10, aromatics, >1% naphthalene	Classification: Not a skin sensitizer. (Literature)

Specific Target Organ Toxicity - Single Exposure:

Poly[oxy(1,2-propanediyl)], .alpha.-(3-aminopropyl)-.omega.-hydroxy-, C12-15 alkyl ethers	Nose, throat and lung irritant.
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, less then 2% aromatics	If material is misted or if vapours are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.
Distillates (petroleum), hydrotreated middle	May cause irritation to the mucous membranes and upper respiratory tract.
Hydrocarbons, C10, aromatics, >1% naphthalene	If material is misted or if vapours are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.
Poly[oxy(1,2-propanediyl)].alpha.-propyl-.omega.-hydroxy-C12-15 alkyl ethers	Nose, throat and lung irritant.

Aspiration Hazard:

Product:	May be fatal if swallowed and enters airways.

Other effects:

Chronic Effects

Carcinogenicity:

Product:	Not available.
++ Naphthalene	A two-year National Toxicology Program (NTP) study found an increased incidence of nasal tumours in rats exposed to naphthalene by inhalation. In mice similarly exposed, increased incidences of alveolar/bronchiolar adenomas were observed. IARC 2B: Possibly carcinogenic to humans.

Germ Cell Mutagenicity:

Distillates (petroleum), hydrotreated middle	The Ames Salmonella test for mutagenicity was negative for this product.
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, less then 2% aromatics	In vitro and in vivo genetic toxicity studies were negative.
++ Naphthalene	Naphthalene has caused mutagenic effects in in vitro studies with metabolic activation, however, in vivo studies do not show evidence of germ cell mutagenicity.

Reproductive toxicity:

No data available

Specific Target Organ Toxicity - Repeated Exposure:

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, less then 2% aromatics	Repeated overexposure to petroleum naphtha can cause nervous system damage.
Hydrocarbons, C10, aromatics, >1% naphthalene	Repeated overexposure to petroleum naphtha can cause nervous system damage.
++ Naphthalene	Repeated overexposure to naphthalene may cause cataracts. Repeated overexposure to naphthalene may cause destruction of red blood cells with anaemia, fever, jaundice and kidney and liver damage.

SECTION 12: Ecological information

12.1 Ecotoxicity

Fish

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, less then 2% aromatics	LC 50 (Rainbow Trout, 4 d): > 1,000 mg/l
Phenol, (dimethylamino)methyl-, polyisobutylene derivs.	LC 50 (Fathead Minnow, 4 d): 31 mg/l
Hydrocarbons, C10, aromatics, >1% naphthalene	LC 50 (Rainbow Trout, 4 Days): 2 mg/l

Aquatic Invertebrates

Hydrocarbons, C11-C14, n-	EC 50 (Water flea (Daphnia magna), 2 d): > 1,000 mg/l

alkanes, isoalkanes, cyclics, less then 2% aromatics	
Phenol, (dimethylamino)methyl-, polyisobutylene derivs.	EC 50 (Water flea (Daphnia magna), 2 d): > 100 mg/l
Hydrocarbons, C10, aromatics, >1% naphthalene	EC 50 (Water flea (Daphnia magna), 2 d): 3 mg/l

Toxicity to Aquatic Plants

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, less then 2% aromatics	EC 50 (Green algae (Selenastrum capricornutum), 3 d): > 1,000 mg/l LC 50 (Green algae (Selenastrum capricornutum), 3 d): > 1,000 mg/l
Phenol, (dimethylamino)methyl-, polyisobutylene derivs.	EC 50 (Green algae (Selenastrum capricornutum), 4 d): > 450 mg/l
Hydrocarbons, C10, aromatics, >1% naphthalene	EC 50 (Green algae (Selenastrum capricornutum), 4 d): 1.1 mg/l

Toxicity to soil dwelling organisms

No data available

Sediment Toxicity

No data available

Toxicity to Terrestrial Plants

No data available

Toxicity to Above-Ground Organisms

No data available

Toxicity to microorganisms

Phenol, (dimethylamino)methyl-, polyisobutylene derivs.	EC 50 (Sludge, 0.1 d): > 1,000 mg/l

12.2 Persistence and Degradability

Biodegradation

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, less then 2% aromatics	Oxygen depletion 69 % (28 d, OECD TG 301 F)
Distillates (petroleum), hydrotreated middle	Oxygen depletion 60 % (28 d, OECD TG 301 F)
Phenol, (dimethylamino)methyl-, polyisobutylene derivs.	Dissolved organic carbon (DOC) 20.7 % (28 d, Inherent Sludge)
Hydrocarbons, C10, aromatics, >1% naphthalene	Oxygen depletion 58 % (28 d, OECD TG 301 F)

BOD/COD Ratio

No data available

12.3 Bioaccumulative Potential

Bioconcentration Factor (BCF)

No data available

Partition Coefficient n-octanol / water (log Kow)
No data available

12.4 Mobility:
No data available

12.5 Results of PBT and vPvB assessment
No data available

12.6 Other Adverse Effects: No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal methods: Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Dispose of packaging or containers in accordance with local, regional, national and international regulations. Empty container contains product residue which may exhibit hazards of product.

Contaminated Packaging: Container packaging may exhibit hazards.

SECTION 14: Transport information

ADR

14.1 UN Number:	UN 3082
14.2 UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Polyether amine, Hydrotreated middle distillates)
14.3 Transport Hazard Class(es)	
Class:	9
Label(s):	9
Hazard No. (ADR):	90
Tunnel restriction code:	(E)
14.4 Packing Group:	III
14.5 Environmental Hazards:	Marine Pollutant
14.6 Special precautions for user:	None established

IMDG

14.1 UN Number:	UN 3082
14.2 UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Polyether amine, Hydrotreated middle distillates)
14.3 Transport Hazard Class(es)	
Class:	9
Label(s):	9
EmS No.:	F-A, S-F
14.3 Packing Group:	III
14.5 Environmental Hazards:	Marine Pollutant
14.6 Special precautions for user:	None established

IATA

14.1 UN Number:	UN 3082
14.2 Proper Shipping Name:	Environmentally hazardous substance, liquid, n.o.s.(Polyether amine, Hydrotreated middle distillates)
14.3 Transport Hazard Class(es):	
Class:	9
Label(s):	9MI
14.4 Packing Group:	III
14.5 Environmental Hazards:	Marine Pollutant
14.6 Special precautions for user:	None established
Other information	
Passenger and cargo aircraft:	Allowed.
Cargo aircraft only:	Allowed.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

None known.

Shipping descriptions may vary based on mode of transport, quantities, temperature of the material, package size, and/or origin and destination. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material. For transportation, steps must be taken to prevent load shifting or materials falling, and all relating legal statutes should be obeyed. Review classification requirements before shipping materials at elevated temperatures.

SECTION 15: Regulatory information

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

EU Regulations

Regulation (EC) No. 2037/2000 Substances that deplete the ozone layer:
None present or none present in regulated quantities.

Regulation (EC) No. 850/2004 on persistent organic pollutants:
None present or none present in regulated quantities.

Regulation (EC) No. 689/2008 Import and export of dangerous chemicals:
None present or none present in regulated quantities.

Regulation (EC) No. 1907/2006, REACH Article 59(1). Candidate List:
None present or none present in regulated quantities.

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended:
None present or none present in regulated quantities.

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use:
None present or none present in regulated quantities.

Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work.:
None present or none present in regulated quantities.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breast feeding.:

Chemical name	EC No.	Concentration
Naphthalene	202-049-5	0.1 - 1.0%

Directive 96/82/EC (Seveso II): on the control of major accident hazards involving dangerous substances:

Chemical name	EC No.	Concentration
Benzene, 1,2,4-trimethyl-	202-436-9	0.1 - 1.0%
Naphthalene	202-049-5	0.1 - 1.0%
1,3,5-trimethylbenzene	203-604-4	0.1 - 1.0%

EU. Regulation No. 166/2006 PRTR (Pollutant Release and Transfer Registry), Annex II: Pollutants:

Chemical name	EC No.	Concentration
Naphthalene	202-049-5	0.1 - 1.0%

Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work:

Chemical name	EC No.	Concentration
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, less then 2% aromatics	926-141-6	30 - 40%
Benzene, 1,2,4-trimethyl-	202-436-9	0.1 - 1.0%
Naphthalene	202-049-5	0.1 - 1.0%
1,3,5-trimethylbenzene	203-604-4	0.1 - 1.0%

Inventory Status

Australia (AICS)
All components are in compliance with chemical notification requirements in Australia.

Canada (DSL/NDSL)
All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.

China (IECSC)
All components of this product are listed on the Inventory of Existing Chemical Substances in China.

European Union (REACh)
To obtain information on the REACH compliance status of this product, please e-mail REACH@SDSInquiries.com.

Japan (ENCS)
This product contains a substance that is not listed on the Japanese Existing and New Chemical Substances (ENCS) list.

Korea (ECL)
All components are in compliance in Korea.

New Zealand (NZIoC)
All components are in compliance with chemical notification requirements in New Zealand.

Philippines (PICCS)
All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).

Switzerland (SWISS)
All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.

Taiwan (TCSCA)
All components of this product are listed on the Taiwan inventory.

United States (TSCA)
All components of this material are on the US TSCA Inventory.

The information that was used to confirm the compliance status of this product may deviate from the chemical information shown in Section 3.

15.2 Chemical safety assessment: No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Internal company data and other publicly available resources.

Key literature references and sources for data:

Wording of the H-statements in section 2 and 3:

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.
H318	Causes serious eye damage.
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. H412 Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms:

ACGIH – American Conference of Governmental Industrial Hygienist
ADR - International Carriage of Dangerous Goods by Road
AICS - Australian Inventory of Chemical Substances
ATEmix - Acute Toxicity Estimate for the mixture
BCF - Bio concentration factor
DMSO - Dimethyl sulfoxide
DSL - Domestic Substance List
EC50 - Effective concentration that gives a response in 50% of the population
ECHA - European Chemical Agency
ECL - Existing Chemical List
ENCS - Existing and New Chemical Substances
EPA – Environmental Protection Agency
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association
IECSC - Inventory of Existing Chemical Substances
IMDG - International Maritime Dangerous Goods
IP 346 – A gravimetric assay used to determine the percentage weight of polycyclic aromatics in oil, via a DMSO extraction technique
LC50 - Lethal concentration required to kill 50% of the population
MARPOL - International Conventions for the Prevention of Pollution from Ships
NDSL - Non Domestic Substance List
NOAEC - No observed adverse effect concentration
NOAEL - No observed adverse effect level
NOEC - No observed effective concentration
NTP - National Toxicology Program
NZIoc - New Zealand Inventory of chemicals
OECD TG - Organization for Economic Cooperation and Development Test Guidelines
OSHA – Occupational, Safety, and Health Administration

PBT – Persistent bioaccumulative toxic chemical
PEL – Permissible Exposure Level
PICCS - Philippine Inventory of Chemicals and Chemical Substances
PPE - Personal Protective Equipment
PRTR - Pollutant Release and Transfer Register
REACH - Registration, Evaluation, Authorization & restriction of Chemicals
SVHC - Substance of Very High Concern
SWISS - Switzerland chemical ordinance
TCSCA - Toxic Chemical Substance Control Act
TLV – Threshold Limit Value
TSCA - Toxic Substances Control Act
TWA – Time Weighted Average
vPvB – very Persistent very Bioaccumulative

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