

Safety Data Sheet
 according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
 OSHA GHS

Printing date 17.04.2015

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

- **1.1 Product identifier**
- **Trade name: Vanguard**
- **Article number: 7156**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
 No further relevant information available.
- **Application of the substance / the mixture** Fuel additive
- **1.3 Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
 ATCO International
 1401 Barclay Circle, SE
 Marietta, Ga 30060
 770-424-7550
- **1.4 Emergency telephone number:**
 ChemTel Inc.
 (800)255-3924, +1 (813)248-0585

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
 The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H411.
 Classifications listed also are applicable to the OSHA GHS Hazard Communication Standard (29CFR1910.1200).
 The following Hazard Statements are applicable only according to OSHA regulations within the United States. These Statements are not applicable for the CLP regulation (1272/2008/EC) in the EU: H317, H351.



Skin Sens. 1 H317: May cause an allergic skin reaction.

Carc. 2 H351: Suspected of causing cancer.



flame

Flam. Liq. 3 H226 Flammable liquid and vapour. health



hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

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Skin Irrit. 2 H315 Causes skin irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.

• **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xn; Harmful

R21-65: Harmful in contact with skin. Harmful: may cause lung damage if swallowed.



Xi; Irritant

R38: Irritating to skin.



N; Dangerous for the environment

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R10-67: Flammable. Vapours may cause drowsiness and dizziness.

• **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

• **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

• **Additional information:**

There are no other hazards not otherwise classified that have been identified. 0 percent of the mixture consists of component(s) of unknown toxicity

• **2.2 Label elements**

• **Labelling according to Regulation (EC) No 1272/2008**

The product is additionally classified and labelled according to the Globally Harmonized System within the United States (GHS).

The product is classified and labelled according to the CLP regulation.

• **Hazard pictograms**



This pictogram only applicable for EU regulations. Not for use in the United States (OSHA GHS).



GHS02 GHS07 GHS08 GHS09

• **Signal word** Danger

• **Hazard-determining components of labelling:**

Distillates (petroleum), hydrotreated
light Hydroxyethylated aminoethylamide

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naphthalene

· Hazard statements

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The following Hazard Statements are applicable only according to OSHA regulations within the United States. These Statements are not applicable for the CLP regulation (1272/2008/EC) in the EU: H317, H351.

H317: May cause an allergic skin reaction. H351: Suspected of causing cancer. H226 Flammable liquid and vapour. H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H304 May be fatal if swallowed and enters airways.

H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P261 Avoid breathing mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection.

P233 Keep container tightly closed.

P264 Wash thoroughly after handling.

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

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P370+P378 In case of fire: Use foam, powder, or carbon dioxide for extinction.

P362 Take off contaminated clothing and wash before reuse.

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

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

P331 Do NOT induce vomiting.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Additional information:

EUH208 Contains Hydroxyethylated aminoethylamide. May produce an allergic reaction.

· Hazard description:**· WHMIS-symbols:**

B3 - Combustible liquid

D2B - Toxic material causing other toxic effects

**· NFPA ratings (scale 0 - 4)**

Health = 2

Fire = 2

Reactivity = 0

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• **HMIS-ratings (scale 0 - 4)**

HEALTH	2	Health = *2
FIRE	2	Fire = 2
REACTIVITY	0	Reactivity = 0

• **HMIS Long Term Health Hazard Substances**

91-20-3 naphthalene

• **2.3 Other hazards**

• **Results of PBT and vPvB assessment**

• **PBT:** Not applicable. .

• **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

• **3.2 Mixtures**

• **Description:** Mixture of substances listed below with nonhazardous additions.

• **Dangerous components:**

CAS: 64742-47-8 EINECS: 265-149-8 Index number: 649-422-00-2	Distillates (petroleum), hydrotreated light ☒ Xn R65; ☒ Xi R38; ☒ R51/53 R10 ☒ Flam. Liq. 3, H226 ☒ Asp. Tox. 1, H304 ☒ Aquatic Chronic 2, H411 ☒ Skin Irrit. 2, H315; STOT SE 3, H336	50-100%
CAS: 1330-20-7 EINECS: 215-535-7 Index number: 601-022-00-9	xylene ☒ Xn R20/21; ☒ Xi R38 R10 ☒ Flam. Liq. 3, H226 ☒ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	2,5-10%
CAS: 27247-96-7 EINECS: 248-363-6	2-Ethylhexyl Nitrate ☒ Xn R20/21/22; ☒ R51/53 ☒ Aquatic Chronic 2, H411 ☒ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	2,5-10%
CAS: 64742-94-5 EINECS: 265-198-5 Index number: 649-424-00-3	Solvent naphtha (petroleum), heavy arom. ☒ Xn R65 ☒ Asp. Tox. 1, H304	2,5-10%

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		(Contd. of page 4)
CAS: 108-94-1 EINECS: 203-631-1 Index number: 606-010-00-7	cyclohexanone Xn R20 R10 Flam. Liq. 3, H226 Acute Tox. 4, H332	≤ 2,5%
	Hydroxyethylated aminoethylamide C R34; R43 R52/53 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412	< 1%
CAS: 91-20-3 EINECS: 202-049-5 Index number: 601-052-00-2	naphthalene Xn R22-40; R50/53 Carc. Cat. 3 Carc. 2, H351 Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Acute Tox. 4, H302	< 1%
<p>Additional information: For the listed ingredients, the identity and exact percentages are being withheld as a trade secret. For the wording of the listed risk phrases refer to section 16.</p>		

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Immediately remove any clothing soiled by the product. Take affected persons out into the fresh air.

After inhalation:

Supply fresh air; consult doctor in case of complaints.

Provide oxygen treatment if affected person has difficulty breathing.

In case of irregular breathing or respiratory arrest provide artificial respiration.

In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Immediately remove any clothing soiled by the product.

Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.

After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

A person vomiting while laying on their back should be turned onto their side.

4.2 Most important symptoms and effects, both acute and delayed

Headache

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Allergic reactions
 Dizziness
 Coughing
 Breathing difficulty
 Irritant to skin and mucous membranes.
 Slight irritant effect on eyes.
 Nausea in case of ingestion.
 Gastric or intestinal disorders when ingested.

- **Hazards**

Danger of impaired breathing.
 Danger of convulsion.
 Danger of disturbed cardiac rhythm.
 Vapours may cause drowsiness and dizziness.

- **4.3 Indication of any immediate medical attention and special treatment needed**

May produce a narcotic effect.
 If swallowed or in case of vomiting, danger of entering the lungs. Medical supervision for at least 48 hours.
 Monitor circulation, possible shock treatment.
 Treat skin and mucous membrane with antihistamine and corticoid preparations. Contains Hydroxyethylated aminoethylamide. May produce an allergic reaction. Later observation for pneumonia and pulmonary oedema.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**

- **Suitable extinguishing agents:**

Foam
 Fire-extinguishing powder
 Gaseous extinguishing agents Carbon dioxide
 Water haze or fog

- **For safety reasons unsuitable extinguishing agents:**

Water with full jet
 Water spray

- **5.2 Special hazards arising from the substance or mixture**

Formation of toxic gases is possible during heating or in case of fire.

- **5.3 Advice for firefighters**

- **Protective equipment:**

Wear self-contained respiratory protective device. Wear fully protective suit.

- **Additional information**

Eliminate all ignition sources if safe to do so.
 Cool endangered receptacles with water fog or haze.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources. Protect from heat.

Particular danger of slipping on leaked/spilled product.

6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

Inform respective authorities in case of seepage into water course or sewage system. Prevent from spreading (e.g. by damming-in or oil barriers).

6.3 Methods and material for containment and cleaning up:

Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders). Remove from the water surface (e.g. skim or suck off).

Dispose contaminated material as waste according to item

13. Do not flush with water or aqueous cleansing agents

Send for recovery or disposal in suitable receptacles.

Used rags or other cleaning materials should be soaked with water and placed in a sealed container.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Prevent formation of aerosols.

Avoid splashes or spray in enclosed areas.

Rags / metal wools / cuttings / shavings and waste papers soaked with product must be placed in a sealed, metal container rated for flammable waste.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Flammable liquid and vapour.

Protect from heat.

Fumes can combine with air to form an explosive mixture.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

Provide ventilation for receptacles.

Avoid storage near extreme heat, ignition sources or open flame.

Information about storage in one common storage facility:

Store away from foodstuffs. Store away from oxidising agents.

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- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles. Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace: 64742-47-8 Distillates (petroleum), hydrotreated light**

EL (Canada)	Long-term value: 200 mg/m ³ Skin
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1330-20-7 xylene

IOELV (EU)	Short-term value: 442 mg/m ³ , 100 ppm Long-term value: 221 mg/m ³ , 50 ppm Skin
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PEL (USA)	Long-term value: 435 mg/m ³ , 100 ppm
REL (USA)	Short-term value: 655 mg/m ³ , 150 ppm

TLV (USA)	Long-term value: 435 mg/m ³ , 100 ppm Short-term value: 651 mg/m ³ , 150 ppm Long-term value: 434 mg/m ³ , 100 ppm BEI
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EL (Canada)	Short-term value: 150 ppm Long-term value: 100 ppm
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EV (Canada)	Short-term value: 650 mg/m ³ , 150 ppm Long-term value: 435 mg/m ³ , 100 ppm
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108-94-1 cyclohexanone

IOELV (EU)	Short-term value: 81,6 mg/m ³ , 20 ppm Long-term value: 40,8 mg/m ³ , 10 ppm Skin
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PEL (USA)	Long-term value: 200 mg/m ³ , 50 ppm
REL (USA)	Long-term value: 100 mg/m ³ , 25 ppm Skin

TLV (USA)	Long-term value: 50 mg/m ³ , 20 ppm Skin
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EL (Canada)	Short-term value: 50 ppm Long-term value: 20 ppm Skin
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EV (Canada)	Short-term value: 50 ppm Long-term value: 20 ppm Skin
-------------	---

EV (Canada)	Short-term value: 50 ppm Long-term value: 20 ppm Skin
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91-20-3 naphthalene

IOELV (EU)	Long-term value: 30 mg/m ³ , 10 ppm
PEL (USA)	Long-term value: 50 mg/m ³ , 10 ppm
REL (USA)	Short-term value: 75 mg/m ³ , 15 ppm
TLV (USA)	Long-term value: 50 mg/m ³ , 10 ppm
EL (Canada)	Long-term value: 52 mg/m ³ , 10 ppm Skin; BEI
EV (Canada)	Short-term value: 15 ppm Long-term value: 10 ppm Skin; IARC 2B
EV (Canada)	Short-term value: 78 mg/m ³ , 15 ppm Long-term value: 52 mg/m ³ , 10 ppm

64742-81-0 Kerosine (petroleum), hydrodesulfurized

REL (USA)	Long-term value: 100 mg/m ³ Kerosene only
TLV (USA)	Long-term value: 200 mg/m ³ as total hydrocarbon vapor; Skin; P
EV (Canada)	Long-term value: 200(G) mg/m ³ as total hydrocarbon vapour, Skin

- **DNELs** No further relevant information available.
- **PNECs** No further relevant information available.

· **Ingredients with biological limit values:****1330-20-7 xylene**

BEI (USA)	1,5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids
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108-94-1 cyclohexanone

BEI (USA)	80 mg/L Medium: urine Time: end of shift at end of workweek Parameter: 1,2-Cyclohexanediol with hydrolysis (nonspecific, semi-quantitative)
	8 mg/L Medium: urine Time: end of shift Parameter: Cyclohexanol with hydrolysis (nonspecific, semi-quantitative)

- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals. Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.

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Wash hands before breaks and at the end of work. Do not inhale gases / fumes / aerosols. Avoid contact with the eyes and skin.

- **Respiratory protection:**

Suitable respiratory protective device recommended.

Use suitable respiratory protective device when aerosol or mist is formed. For spills, respiratory protection may be advisable.

- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Safety glasses

- **Body protection:** Solvent resistant protective clothing

- **Limitation and supervision of exposure into the environment**

No further relevant information available.

- **Risk management measures**

See Section 7 for additional information.

No further relevant information available.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Liquid
Colour:	Amber coloured
Odour:	Solvent-like
Odour threshold:	Not determined.

pH-value: Not determined.

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- **Change in condition**
 - Melting point/Melting range:** Not Determined.
 - Boiling point/Boiling range:** Undetermined.
- **Flash point:** 47 °C (117 °F)
- **Flammability (solid, gaseous):** Not applicable.
- **Auto/Self-ignition temperature:** Not determined.
- **Decomposition temperature:** Not determined.
- **Self-igniting:** Product is not self-igniting.
- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
- **Explosion limits:**
 - Lower:** Not determined.
 - Upper:** Not determined.
- **Vapour pressure:** Not determined.
- **Density at 20 °C (68 °F):** 0,83 g/cm³ (6,926 lbs/gal)
- **Relative density** Not determined.
- **Vapour density** Not determined.
- **Evaporation rate** Not determined.
- **Solubility in / Miscibility with water:** Not miscible or difficult to mix.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - Dynamic:** Not determined.
 - Kinematic:** Not determined.
- **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
 Avoid open flame, ignition sources, contact with incompatible substances.
- **10.3 Possibility of hazardous reactions**
 Flammable.
 Develops readily flammable gases/fumes.
 Used empty containers may contain product gases which form explosive mixtures with air. Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised.
 Toxic fumes may be released if heated above the decomposition point.
 Reacts with strong acids and oxidising agents.

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- **10.4 Conditions to avoid**

Keep ignition sources away - Do not smoke. Store away from oxidising agents.

- **10.5 Incompatible materials:** No further relevant information available.

- **10.6 Hazardous decomposition products:**

Carbon monoxide and carbon dioxide
Nitrogen oxides (NO_x)
Hydrocarbons

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

64742-47-8 Distillates (petroleum), hydrotreated light

Oral	LD50	> 5000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)

1330-20-7 xylene

Oral	LD50	4300 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)

91-20-3 naphthalene

Oral	LD50	490 mg/kg (rat)
Dermal	LD50	5000 mg/kg (rat)

- **Primary irritant effect:**

- **on the skin:** Irritant to skin and mucous membranes.

- **on the eye:** Slight irritant effect on eyes.

- **Sensitisation:**

Sensitising effect by skin contact is possible by prolonged exposure.

Contains Hydroxyethylated aminoethylamide. May produce an allergic reaction.

- **Subacute to chronic toxicity:** May be fatal if swallowed and enters airways.

- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

Irritant

Inhalation of concentrated vapours as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc.

Danger through skin adsorption.

- **Acute effects (acute toxicity, irritation and corrosivity):**

May be harmful if swallowed or if inhaled. Vapours have narcotic effect.

- **Repeated dose toxicity:**

May cause damage to organs through prolonged or repeated exposure.

Repeated exposures may result in skin and/or respiratory sensitivity.

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- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):**
Carc. 2B
Based on IARC classifications and not the CLP classification.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**
Toxic for aquatic organisms

1330-20-7 xylene

LC50	13,4 mg/l (pimephales promelas)
	96 Hours

27247-96-7 2-Ethylhexyl Nitrate

LC50	2,00 mg/l (zebra fish) (96hr)
------	-------------------------------

91-20-3 naphthalene

LC50	1-10 mg/l (daphnia)
	48 hr

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:**
Toxic for fish
The product is oxygen-consuming. The declared action may be partly caused by lack of oxygen. Due to mechanical actions of the product (e.g. agglutinations) damages may occur.
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground. Also poisonous for fish and plankton in water bodies. Toxic for aquatic organisms
Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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Product is recyclable as a waste oil. Deliver unused and/or contaminated product to waste oil collectors. Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.1 UN-Number**
- **DOT**

UN1993

Product is additionally classified as a MARINE POLLUTANT based on MARPOL and DOT rules. Labeling as a MARINE POLLUTANT is not required for non-bulk single package shipments by motor vehicle, rail car or aircraft. Bulk packaging consists of a maximum capacity of greater than 450L (119 gallons) for a liquid and a maximum net mass greater than 400kg (882 pounds) for a solid.

UN1993

- **ADR, IMDG, IATA**
- **14.2 UN proper shipping name**



Limited Quantity for packages less than 30 kg (66 lb) and inner packagings less than 5 L (1.3 gal).

- **DOT, IATA**

Flammable liquids, n.o.s. (contains petroleum distillates, xylene)

- **ADR**

1993 FLAMMABLE LIQUID, N.O.S. (contains petroleum distillates, xylene), ENVIRONMENTALLY HAZARDOUS

- **IMDG**

FLAMMABLE LIQUID, N.O.S. (contains petroleum distillates, xylene), MARINE POLLUTANT

- **14.3 Transport hazard class(es)**

- **DOT**



- **Class**
- **Label**

3 Flammable liquids.

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· ADR



- Class 3 (F1) Flammable liquids.
- Label 3

· IMDG



- Class 3 Flammable liquids.
- Label 3

· IATA



- Class 3 Flammable liquids.
- Label 3
- 14.4 Packing group
- DOT, ADR, IMDG, IATA III
- 14.5 Environmental hazards:
- Marine pollutant: Yes
- Special marking (ADR): Symbol (fish and tree)
- 14.6 Special precautions for user: Symbol (fish and tree)
- Danger code (Kemler): Warning: Flammable liquids.
- EMS Number: 33
- EMS Number: F-E, S-E
- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.
- Transport/Additional information:

· ADR

- Limited quantities (LQ) 5L
- Excepted quantities (EQ) Code: E1
- Maximum net quantity per inner packaging: 30 ml
- Maximum net quantity per outer packaging: 1000 ml
- Transport category 3
- Tunnel restriction code D/E

· IMDG

- Limited quantities (LQ) 5L

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· **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· **UN "Model Regulation":**

UN1993, FLAMMABLE LIQUID, N.O.S. (contains petroleum distillates, xylene), ENVIRONMENTALLY HAZARDOUS, 3, III

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

· **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

· **Section 313 (Specific toxic chemical listings):**

1330-20-7 | xylene

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65 (California):**· **Chemicals known to cause cancer:**

64742-94-5 | Solvent naphtha (petroleum), heavy arom.

91-20-3 | naphthalene

· **Chemicals known to cause reproductive toxicity for females:**

Present in trace quantities.

108-88-3 | toluene

· **Chemicals known to cause reproductive toxicity for males:**

Present in trace quantities.

71-43-2 | benzene

· **Chemicals known to cause developmental toxicity:**

Present in trace quantities.

71-43-2 | benzene

108-88-3 | toluene

· **Carcinogenic Categories**· **EPA (Environmental Protection Agency)**

1330-20-7 | xylene

I

91-20-3 | naphthalene

C, CBD

· **IARC (International Agency for Research on Cancer)**

1330-20-7 | xylene

3

108-94-1 | cyclohexanone

3

91-20-3 | naphthalene

2B

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· **TLV (Threshold Limit Value established by ACGIH)**

1330-20-7	xylene	A4
108-94-1	cyclohexanone	A3
91-20-3	naphthalene	A4
64742-81-0	Kerosine (petroleum), hydrodesulfurized	A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients are listed.

· **Canada**

· **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)**

108-94-1 | cyclohexanone

· **Canadian Ingredient Disclosure list (limit 1%)**

None of the ingredients are listed.

· **Other regulations, limitations and prohibitive regulations**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

· **Substances of very high concern (SVHC) according to REACH, Article 57**

None of the ingredients are listed.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer. Route of exposure: Inhalative.
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.
R10 Flammable.
R20 Harmful by inhalation.

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- R20/21 Harmful by inhalation and in contact with skin.
 R20/21/22 Harmful by inhalation, in contact with skin and if swallowed. R22 Harmful if swallowed.
 R34 Causes burns.
 R38 Irritating to skin.
 R40 Limited evidence of a carcinogenic effect.
 R43 May cause sensitisation by skin contact.
 R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 R65 Harmful: may cause lung damage if swallowed.

• **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 ACGIH: American Conference of Governmental Industrial Hygienists
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 NFPA: National Fire Protection Association (USA)
 HMIS: Hazardous Materials Identification System (USA)
 WHMIS: Workplace Hazardous Materials Information System (Canada)
 DNEL: Derived No-Effect Level (REACH)
 PNEC: Predicted No-Effect Concentration (REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 Flam. Liq. 3: Flammable liquids, Hazard Category 3
 Acute Tox. 4: Acute toxicity, Hazard Category 4
 Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
 Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 Carc.
 2: Carcinogenicity, Hazard Category 2
 STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
 Asp. Tox. 1: Aspiration hazard, Hazard Category 1
 Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1
 Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1
 Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2
 Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

• **Sources**