1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the substance or preparation

1.1.1 Product name
NESTE VOLTERA CITRUS

1.1.2 Product code
764200,

1.2 Use of the substance/preparation

1.2.1 Expressed in writing
Car chemical. Windshield cleaning agent.

1.3 Company/undertaking identification

1.3.1 Supplier
Neste Markkinointi Oy

1.3.2 Contact information
Street address
Keilaranta 21
Postcode and post office
Espoo
P.O.Box
P.O.B. 95
Postcode and post office
FIN-00095 NESTE OIL
FINLAND
Telephone
+358- 10 45811
Telefax
+358- 10 45 84442
Business ID
1626490-8
Email
lubetec@nesteoil.com

1.4 Emergency telephone

1.4.1 Telephone number, name and address
+358-9-471 977, +358-9-4711, Poison Information Centre/HUS
P.O.B 340 (Haartmaninkatu 4) 00029 HUS (Helsinki, Finland)

2. HAZARDS IDENTIFICATION

FIRE AND EXPLOSION HAZARD: Highly flammable.
HEALTH HAZARD: Product is not classified hazardous.
ENVIRONMENTAL HAZARD: Product is not classified hazardous.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Hazardous components

3.1.1 CAS number
64-17-5
107-21-1

3.1.2 Chemical name of the substance
Ethanol
1,2-Ethanediol, ethylene glycol

3.1.3 Concentration
Approx. 60 %
1 - 5 %

3.1.4 Warning symbol, R phrases and other information
F; R11
Xn; R22

3.1.7 Other information
Denatured.

4. FIRST AID MEASURES

4.1 Additional advice
-
4.2 **Inhalation**
Move to fresh air in case of accidental inhalation of vapours or decomposition products. If symptoms persist, call a physician.

4.3 **Skin contact**
Remove contaminated clothing. Wash the skin with plenty of water and soap. If skin irritation persists, call a physician.

4.4 **Eye contact**
Rinse immediately with plenty of water for at least 15 minutes. If eye irritation persists, consult a specialist.

4.5 **Ingestion**
If product is swallowed, give water to drink and consult a physician. Never give anything by mouth to an unconscious person.

5. **FIRE-FIGHTING MEASURES**

5.1 **Suitable extinguishing media**
Alcohol-resistant foam, carbon dioxide (CO2), dry chemical.

5.2 **Extinguishing media which must not be used for safety reasons**
Water jet

5.3 **Special protection equipment for firefighters**
Self-contained breathing apparatus and full protective clothing.

5.4 **Specific methods**
Cool product tanks near the fire with water spray from a sufficiently safe distance. Explosion risk due to pressure increase if product containers or tanks are subjected to fire. In the event of fire and/or explosion do not breathe fumes.

6. **ACCIDENTAL RELEASE MEASURES**

6.1 **Personal precautions**

6.2 **Environmental precautions**
Try to restrict the release and prevent spread of the product into the environment. Collect liquid before it spreads into drains, the ground and waters.

6.3 **Clean-up methods**
Small amounts can be collected using absorbent material. Keep in suitable, closed containers for disposal. Final rinsing with large amount of water. Product waste should be disposed in accordance with item 13.

7. **HANDLING AND STORAGE**

7.1 **Handling**
Provide sufficient ventilation when handling the product. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Avoid contact with the eyes and respiratory organs.

7.2 **Storage**
Keep in a well-ventilated place. Keep tightly closed. Store in cool place.

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

8.1 **Exposure limit values**

8.1.1 **Threshold limits**
Ethanol 1000 ppm (8 h) 1300 ppm (15 min)
8.2 Exposure controls
8.2.1 Occupational exposure controls
Provide efficient ventilation when handling the product. Avoid inhalation of vapour and contact with skin. Wear protective equipment when needed.

8.2.1.1 Respiratory protection
Usually not needed. When needed: Filter device: half mask (organic vapour filter, type A2).

8.2.1.2 Hand protection
Protective gloves (e.g. of butyl rubber, nitrile rubber). Penetration time >480 min (ASTM F739). Change protective gloves regularly.

8.2.1.3 Eye protection
Tightly fitting safety goggles if there is a risk of splashing.

8.2.1.4 Skin protection
Protective clothing when needed.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 General information (appearance, odour)
Liquid, yellow, lemony.

9.2 Important health, safety and environmental information
9.2.1 pH
- 
9.2.2 Boiling point/range
Approx. 80°C
9.2.3 Flash point
< 21°C
9.2.5 Explosive properties
9.2.5.1 Lower explosive limit
3.3 vol-% (ethanol)
9.2.5.2 Upper explosive limit
19 vol-% (ethanol)
9.2.7 Vapour pressure
5.8 kPa (20°C, ethanol)
9.2.8 Relative density
Approx. 0.8 (15°C)
9.2.9 Solubility
9.2.9.1 Water solubility
completely miscible
9.2.9.2 Fat solubility (solvent/oil to be specified)
- 
9.2.10 Partition coefficient (n-octanol/water)
Log Kow < -0.32 (ethanol).

9.3 Other information
Autoignition temperature: Approx. 363 °C (ethanol)

10. STABILITY AND REACTIVITY

10.1 Conditions to avoid
Avoid heat, sparks and open flames.

10.2 Materials to avoid
Incompatible with strong acids and oxidizing agents.
10.3 Hazardous decomposition products
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11. TOXICOLOGICAL INFORMATION

11.1 Acute toxicity
Ethanol: Very low toxicity when swallowed LD50/oral/rat = 7 060 mg/kg, dermal (LD50 >2000 mg/l, rabbit) , LC50/inhalation/ 4 h/rat > 20 mg/l.
Ethylene glycol: LD50/oral/rat < 5000 mg/kg, dermal (LD50 >2000 mg/l, rabbit) , LC50/inhalation/4h/rat = 34 mg/l.

11.2 Irritation and corrosion
Repeated exposure may cause skin dryness or cracking.

11.3 Sensitisation
Non-sensitizing.

11.5 Human experience
Vapour irritates the eyes and the respiratory tract. Inhalation of high concentrations has narcotic effect and may lead to cough, headache, dizziness and drowsiness. Ingestion of high amounts may produce drowsiness and unconsciousness. Prolonged or repeated contact causes drying and irritation of the skin.

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity
12.1.1 Aquatic toxicity
Very low toxicity.
Ethanol: LC50/96h/Pimephales promelas = 13 480 mg/l.
Ethylene glycol: LC50/96h/ Salmo Gairdneri > 40 000 mg/l.

12.2 Mobility
Miscible in water. Volatile.

12.3 Persistence and degradability
12.3.1 Biodegradation
Biodegradable (estimate).
Ethanol: Readily biodegradable . BOD5 37 - 86 %

12.3.2 Chemical degradation
Ethanol: t 1/2 : 4 - 6 days .

12.4 Bioaccumulative potential
Not accumulative. Ethanol: log Pow = - 0,32.

13. DISPOSAL CONSIDERATIONS
Product waste should be treated according to national regulations and local authorities´advice.

14. TRANSPORT INFORMATION

14.1 UN-No 1987
14.2 Packaging group II
14.3 Land transport
14.3.1 ADR/RID 3
14.3.2 Risk No. 33
14.3.3 Description of goods UN 1987, ALCOHOLS, N.O.S. (Ethanol), 3, II
14.4 Sea transport
14.4.1 IMDG 3
14.4.2 Proper shipping name  UN 1987, ALCOHOLS, N.O.S. (Ethanol), 3, II
14.4.2.1 Packaging group II
14.4.3 Further information  EmS: F-E, S-D
14.5 Air transport
14.5.1 ICAO/IATA 3
14.5.2 Description of goods  UN 1987, ALCOHOLS, N.O.S. (Ethanol), 3, II

15. REGULATORY INFORMATION

15.1 Information on the warning label
15.1.1 Letter code of the warning symbol and indications of danger for the preparation
   F  Highly flammable
15.1.3 R-phrase(s)
   R11  Highly flammable.
15.1.4 S-phrase(s)
   S7  Keep container tightly closed.
   S16  Keep away from sources of ignition - No smoking.
   S46  If swallowed, seek medical advice immediately and show this container or label.

15.1.5 Special regulations on certain preparations
   ADDITIONAL LABELLING OF RETAIL PACKAGES:  Keep out of reach of children.

16. OTHER INFORMATION

16.1 List of relevant R phrases
   R22  Harmful if swallowed.
   R11  Highly flammable.

16.4 Further information
   Neste Markkinointi Oy/Lubrication, product information, tel. +358 (0)10 45 85410, e-mail: lubetec@nesteoil.com

16.5 Literary reference
   Regulations, databases, literature, own researches.

16.6 Additions, deletions, revisions
   REACH form