Small engine gasoline 95 SE, 4-T; Neste small engine gasoline 95 (BE95SE); Alkylate gasoline

Date 2.11.2012 Previous date: 13.1.2011

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

1.1 Product identifier

1.1.1 Commercial Product Name

Small engine gasoline 95 SE, 4-T; Neste small engine gasoline 95 (BE95SE); Alkylate gasoline

1.1.2 Product code

(ID 10529), 130130, 130795

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

1.2.1 Recommended use

Special and small engine fuel.

1.3 Details of the supplier of the safety data sheet

1.3.1 Supplier

	Neste Oil Oyj
Street address	Keilaranta 21
Postcode and post office	Espoo
	Finland
Postcode and post office	P.O.B. 95 FIN-00095 NESTE OIL
	Finland
Telephone	+358-10 45811
Telefax	+358-10 45 84442
Business ID	1852302-9
Email	products.oil@nesteoil.com (Oil Product Information)

1.4 Emergency telephone number

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

Extremely flammable liquid and vapour. (Flam. Liq. 1, H224)
May be fatal if swallowed and enters airways. (Asp. Tox. 1, H304)
Causes skin irritation. (Skin Irrit. 2, H315)
May cause drowsiness or dizziness. (STOT SE 3, H336)
Toxic to aquatic life with long lasting effects. (Aq. Chronic 2, H411)

2.1 Classification of the substance or mixture

1272/2008 (CLP)

Flam. Liq. 1, H224
Asp. Tox. 1, H304
Skin Irrit. 2, H315
STOT SE 3, H336
Aquatic Chronic 2, H411

67/548/EEC - 1999/45/EC

F+, Xn, N; R38-65-67-51/53-12

2.2 Label elements

ADDITIONAL LABELLING OF RETAIL PACKAGES: Keep away from children. USE AS MOTOR FUEL ONLY. RETAIL PACKAGES SHALL BE EQUIPPED WITH CHILD-RESISTANT FASTENINGS AND TACTILE WARNINGS OF DANGER.

1272/2008 (CLP)

GHS09 - GHS08 - GHS07 - GHS02

Signal word **Danger**

Hazard Statements

H224	Extremely flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statements

P210	Keep away from heat, sparks, open flames and hot surfaces. – No smoking.
P261	Avoid breathing vapours.
P280	Wear protective gloves.
P273	Avoid release to the environment.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331	Do NOT induce vomiting.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

2.3 Other hazards

Evaporates readily. Vapour is heavier than air and can form explosive mixtures with air. Vapours may cause irritation to the eyes, respiratory system and the skin. Risk of soil and ground water contamination.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

CAS number	Chemical name of the substance	Concentration	Classification
86290-81-5/ 289-220-8 (CAS/EC)	Gasoline	Ca. 100 %	CLP: Flam. Liq. 1, H224 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aq. Chronic 2, H411 DSD-DPD: F+; Xn; N; R12-38-65-67-51/53

3.3 Other information

REACH Registration Number (naphtha): 01-2119471335-39-0021.
Preparation of a petroleum product and additives. contains: benzene (CAS 71-43-2) vol. %< 0,1 ; n-hexane (CAS 110-54-3) vol. %< 0,5 ; aromatic hydrocarbons vol. %<0,5 .

4. FIRST AID MEASURES

4.1 Description of first aid measures

Before attempting to rescue casualties, isolate area from all potential sources of ignition including disconnecting electrical supply.

4.1.2 Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration when needed. Consult a physician. Obtain medical attention if casualty has an altered state of consciousness or if symptoms do not resolve.

4.1.3 Skin contact

Remove contaminated clothing, preferably after safety shower (evaporation of liquid may cause fire hazard). Wash the skin with plenty of water and soap. If skin irritation persists, call a physician.

4.1.4 Eye contact

Rinse immediately with plenty of water, also under the eyelids. If irritation, blurred vision or swelling occurs and persists, obtain medical advice from a specialist.

4.1.5 Ingestion

DO NOT INDUCE VOMITING. In case of ingestion, always assume that aspiration has occurred. Consult a physician. Consult a physician (risk of aspiration into the lungs especially if nausea or irritation occurs).

4.2 Most important symptoms and effects, both acute and delayed

Causes skin irritation. May irritate eyes. Inhalation of high concentrations has narcotic effect and may lead to cough, headache, dizziness and drowsiness. Ingestion of larger amounts may cause defects to the central nervous system (e.g. dizziness, headache). Aspiration into the lungs can cause fatal chemical pneumonitis.

4.3 Indication of immediate medical attention and special treatment needed

Aspiration into the lungs can cause fatal chemical pneumonitis.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

5.1.1 Suitable extinguishing media

Dry powder, carbon dioxide. Sand. Heavy foam and water fog for professional fire-fighters.

5.1.2 Extinguishing media which must not be used for safety reasons

Water jet

5.2 Special hazards arising from the substance or mixture

Extremely flammable liquid and vapour. Explosion risk if vapour, which is heavier than air, accumulates into hollows or confined spaces. Explosion risk due to pressure increase if product containers or tanks are subjected to fire. Strong heating or fire can produce carbon monoxide and other products resulting from uncomplete combustion. This substance will float and can be reignited on surface water.

5.3 Advice for firefighters

Cool product containers and tanks near the fire with water spray from a sufficiently safe distance. Prevent fire extinguishing water from contaminating surface water or the ground water system.

5.4 Specific methods

Precautions for fire-fighting: Self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate people upwind from the spill area. Ensure adequate ventilation, especially in confined areas. Vapour is heavier than air and spreads along the ground. In case of large spillages, alert occupants in downwind areas. Avoid inhalation of vapour and contact with skin. Wear adequate protective equipment at all operations.

Remove all sources of ignition. Eliminate fire and explosion risk by keeping ignition sources out of the area and preventing vapour accumulating into hollows and confined spaces. Take measures to prevent the build up of electrostatic charge. Large spillages may be cautiously covered with foam, if available, to limit fire risk

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. In case of spill, immediately contact local authorities. Risk of soil and ground water contamination.

6.3 Methods and materials for containment and cleaning up

Immediately start clean-up of the liquid and contaminated soil. Collect free product with suitable means. Small amounts can be collected using non-combustible absorbent material. Pay attention to the fire, explosion and health hazards caused by the product.
Spillages of liquid product in the water will likely result in a quick and complete vaporization of the product. Control the spreading of the spillage. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities

6.4 Reference to other sections

For personal protection see section 8. Product waste should be disposed in accordance with item 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Handle the product in closed systems or provide sufficient ventilation. Try to avoid product volatilization during handling and transferring. Avoid inhalation of vapour and contact with skin. Wear protective equipment when needed. When using, do not eat, drink or smoke. Wash hands before breaks and at the end of workday. DURING TANK CLEANING OPERATIONS FOLLOW SPECIAL INSTRUCTIONS (risk of oxygen displacement, ethers and hydrocarbons). Use only bottom loading of tankers, in compliance with European legislation. Do not use compressed air for filling, discharging, or handling operations.

Keep away from fire, sparks and heated surfaces. Keep away from sources of ignition. Take precautionary measures (e.g. earthing) against static discharges. Use explosion-proof electrical equipment. The product is heavier than air and in the event of a leak, vapour may accumulate in confined spaces and low lying areas where it may easily be accidentally ignited.

7.2 Conditions for safe storage, including any incompatibilities

In a tank or a store suitable for extremely flammable liquids. Light hydrocarbon vapours can build up in the headspace of containers. Protect from sunlight. Take precautionary measures to prevent product spills into drains, the ground or waters. Any possible leakage is considered by constructing collecting pools and sewerage systems as well as by surfacing the loading and unloading stations.

Store in accordance with local regulations. Keep in properly labelled containers. Store retail batches in tightly sealed, labelled containers which are impermeable to hydrocarbons. Recommended materials for containers, or container linings use mild steel, stainless steel. Some synthetic materials may be unsuitable for containers or container linings depending on the material specification and intended use.

7.3 Specific end use(s)

None known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Threshold limits

Solvent naphtha, group 1*	500 mg/m^3 (8 h) HTP 2011/FIN

8.1.2 Other information on limit values

The individual limit values can also be applied for the petrol hydrocarbons.
* The occupational exposure monitoring method: SFS-EN 689, SFS-3861

8.1.4 DNELs

Workers, naphtha, Inhalation:
1300 mg/m^3 /15min (Short-term exposure, systemic effects)
1100 mg/m^3 /15min (Short-term exposure, local effects)
840 mg/m^3 /8h (Long-term exposure, local effects)

Consumers, naphtha, Inhalation:
1200 mg/m^3 /15min (Short-term exposure, systemic effects)
640 mg/m^3 /15min (Short-term exposure, local effects)
180 mg/m^3 /24h (Long-term exposure, local effects)

8.1.5 PNECs
No information available.

8.2 Exposure controls

8.2.1 Appropriate engineering controls
Handle the product in closed systems or provide sufficient ventilation. Use personal protective equipment and/or local ventilation when needed. Handle in accordance with good industrial hygiene and safety practice. During tank operations follow special instructions (risk of oxygen displacement and hydrocarbons).

8.2.2 Individual protection measures

8.2.2.1 Respiratory protection
Filter device/Half mask (organic vapour filter, type AX). Filter device could be used maximum 2 hours at a time. Filter devices must not be used in conditions where the oxygen level is low (< 17 vol.-%). At high concentrations a breathing apparatus must be used (self-contained or fresh air hose breathing apparatus). Filter must be changed often enough. Respirators according to standards EN 140 and EN 141.

8.2.2.2 Hand protection
Protective gloves (e.g. Nitrile rubber, PVA) Breakthrough time >480, Protection class 6.. Protective gloves according to standards EN 420 and EN 374. Change protective gloves regularly. Attention: PVA does not resist water.

8.2.2.3 Eye/face protection
Wear eye/face protection.

8.2.2.4 Skin protection
Protective clothing (antistatic), splash-proof chemical protective clothing when needed.

8.2.3 Environmental exposure controls
Any possible leakage is considered by constructing collecting pools and sewerage systems as well as by surfacing the loading and unloading stations.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

9.1.1 Appearance
Clear liquid with low viscosity. Bluish when lubricant has been added.

9.1.2	**Odour**	Mild hydrocarbon odour.
9.1.3	**Odour threshold**	no data available
9.1.4	**pH**	no data available
9.1.5	**Melting point/freezing point**	no data available
9.1.6	**Initial boiling point and boiling range**	20...210°C
9.1.7	**Flash point**	Below 0°C
9.1.8	**Evaporation rate**	no data available
9.1.10	**Explosive properties**	
9.1.10.1	**Lower explosion limit**	1,4 vol-%
9.1.10.2	**Upper explosion limit**	7,6 vol-%
9.1.11	**Vapour pressure**	50...65 kPa (38 °C; water= 6,5 kPa)
9.1.12	**Vapour density**	Vapour density > 3 (air= 1).
9.1.13	**Relative density**	0,68...0,72 (15/4 °C; water= 1)
9.1.14	**Solubility(ies)**	
9.1.14.1	**Water solubility**	Slightly soluble(< 50 mg/l; 20 °C)
9.1.14.2	**Fat solubility (solvent /oil to be specified)**	No data
9.1.15	**Partition coefficient: n-octanol/water**	Naphtha hydrocarbons log Kow = 3... above 6.
9.1.16	**Auto-ignition temperature**	Approx. 400°C

9.1.17	**Decomposition temperature**	no data available
9.1.18	**Viscosity**	Kinematic viscosity < 1 mm²/s (38 °C; water= 0,6 mm²/s).
9.1.19	**Explosive properties**	Not explosive
9.1.20	**Oxidising properties**	Not oxidizing

9.2 Other information
None known.

10. STABILITY AND REACTIVITY

10.1 Reactivity
No dangerous reaction known under conditions of normal use.

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
None known.

10.4 Conditions to avoid
Keep away from fire, sparks and heated surfaces.

10.5 Incompatible materials
Oxidizing agents.

10.6 Hazardous decomposition products
No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

11.1.1 Acute toxicity
Very low toxicity.

LD50/oral/rat > 5000 mg/kg (OECD 401).
LC50/Inhalation:/rat > 5610 mg/m3 (OECD 403).
LD50/dermal/rabbit > 2000 mg/kg bw (OECD 402)

11.1.2 Irritation and corrosion
Causes skin irritation. (OECD 404). Eye irritation: Not classified. (OECD 405). May cause respiratory tract irritation. When ingested, product irritates the digestive tract.

11.1.3 Sensitisation
Not a skin sensitizer. (OECD 406).

11.1.4 Subacute, subchronic and prolonged toxicity
Not classifiable as a human carcinogen. (OECD451)
No toxicity to reproduction (OECD 416, 421)
Damage to fetus not classifiable (OECD 414)
Genotoxicity tests (in vitro and in vivo) have been negative. (OECD 471, 475, 476, EPA OPPTS 870.5395)

11.1.5 STOT-single exposure
Over-exposure leads to dizziness, nausea, headache and finally narcotic effects.

11.1.6 STOT-repeated exposure
No known effect. (OECD 410, 412, 453, EPA OPPTS 870.3465)

11.1.7 Aspiration hazard
May be fatal if swallowed and enters airways. Aspiration of ingested product into lungs can cause fatal chemical pneumonitis.

11.1.8 Other information on acute toxicity
No data.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

12.1.1 Aquatic toxicity
Toxic to aquatic life with long lasting effects.

fish: LL50/96h = 8.2 mg/L (EPA 66013-75-009, OECD 203).
crustacean: EL50/48h = 4.5 mg/L, NOELR/48h = 0.5 mg/L (OECD 202). EL50/21d = 10 mg/L; NOELR/21d = 2.6 mg/L (OECD 211).
alga: EL50/96h = 3.7 mg/L, NOELR/72h = 0.5 mg/L (OECD 201).

12.1.2 Toxicity to other organisms
Micro-organisms (wastewater sludge): EC50/40h = 15.4 mg/L (QSAR)

12.2 Persistence and degradability

12.2.1 Biodegradation
Naphtha: Inherently biodegradable. (OECD 301F, ISO/DIS 14593)

12.2.2 Chemical degradation
Does not hydrolyze in water. Slightly soluble.Volatile compounds are degradable by atmospheric chemistry. Degradation occurs extremely slowly under anaerobic conditions.

12.3 Bioaccumulative potential
Possibly accumulative (log Kow > 3).

12.4 Mobility in soil
Product evaporates readily from surface soil and water. Volatilization is the fastest and most dominant elimination process in surface water and soil. Product can penetrate soil until reaching ground water, where the most soluble components will spread. High-molecular weight naphtha hydrocarbons can be adsorbed onto organic material in soil or sediment (log Kow > 3).

12.5 Results of PBT and vPvB assessment
This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects
Information given is based on data on the components and the ecotoxicology of similar products.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product waste should be treated according to national regulations and local authorities´ advice. When handling the waste note the hazards and take care of necessary safety measures, labelling and information.

13.2 Waste from residues / unused products
Empty containers may contain flammable product residues. Empty containers should be taken for local recycling or waste disposal.

14. TRANSPORT INFORMATION

14.1	**UN number**	1203
14.2	**UN proper shipping name**	UN 1203, GASOLINE
14.3	**Transport hazard class(es)**	3

14.4 Packing group II

14.5 Environmental hazards
MARINE POLLUTANT

14.6 Special precautions for users
EmS: F-E, S-E

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Noxious liquid, F, (6) n.o.s., (BE 95 SE, contains mineral oil). Category Y, Ship Type 2.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment
A Chemical Safety Assessment has been carried out for this substance.

16. OTHER INFORMATION

16.1 Additions, Deletions, Revisions
Paragraph 4-8, 10-13: Chemical Safety Assessment
Paragraph 14: Transport information (UN number)
Updated according to regulation (EU) N:o 453/2010 amending regulation (EC) N:o 1907/2006 (REACH).

16.2 Key or legend to abbreviations and acronyms
CLP = Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
DSD = Council Directive (67/548/EEC) on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances
DPD = Directive 1999/45/EC of the European Parliament and of the Council concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations

DNEL = Derived No-Effect Level
PNEC = Predicted No-Effect Concentration

16.3 Key literature references and sources for data
Concawe report 01/54, 6/05, 11/2010. Regulations, databases, literature, own research. Chemical Safety Report 2010.

16.5 List of relevant R phrases, hazard statements, safety phrases and/or precautionary statements

R12	Extremely flammable.
R38	Irritating to skin.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.
R67	Vapours may cause drowsiness and dizziness.
H224	Extremely flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

16.7 Recommended restrictions

DO NOT SIPHON GASOLINE BY MOUTH SUCTION. USE AS MOTOR FUEL ONLY.

16.8 Further information

SAILER Mineralölhandel GmbH, Oil Product Information, e-mail: verkauf@saileroil.de