



SAFETY DATA SHEET NESTE VALOPETROLI

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

1.1. Product identifier

Product name	NESTE VALOPETROLI
Product number	ID 10592
Internal identification	135156, 765200, 896500

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

Identified uses	Heating fuel. Formulation & (re)packing of substances and mixtures, Uses in coatings
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1.3. Details of the supplier of the safety data sheet

Supplier	Neste Markkinointi Oy Keilaranta 21, Espoo, P.O.B. 95, FIN-00095 NESTE, FINLAND Tel. +358 10 45811 lubetec@neste.com
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1.4. Emergency telephone number

National emergency telephone number	+358-9-471 977, +358-9-4711, Poison Information Centre
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SECTION 2: Hazards identification

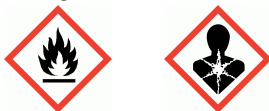
2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Flam. Liq. 3 - H226
Health hazards	Asp. Tox. 1 - H304
Environmental hazards	Not Classified

2.2. Label elements

Pictogram



Signal word	Danger
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Hazard statements	H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways.
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Precautionary statements	P102 Keep out of reach of children. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P331 Do NOT induce vomiting. P501 Dispose of contents/ container in accordance with national regulations.
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2.3. Other hazards

NESTE VALOPETROLI

Other hazards Combustible liquid. Evaporates slowly. Vapours may irritate throat/respiratory system. Risk of soil and ground water contamination.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics CAS number: — REACH registration number: 01-2119457273-39-XXXX	80 % (1)
Classification Asp. Tox. 1 - H304	
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics CAS number: — REACH registration number: 01-2119463258-33-XXXX	20 % (2)
Classification Flam. Liq. 3 - H226 STOT SE 3 - H336 Asp. Tox. 1 - H304	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Other information (1), Total aromatics at maximum:, 1 vol-%., Benzene (CAS 71-43-2) < 0,1 %., n-hexane (CAS 110-54-3), <1 %, Identity outside the EU (CAS number and name of the substance):, 64742-48-9, Naphtha (petroleum), hydrotreated heavy., Previous EC number:, 265-150-3, (2), Total aromatics at maximum:, <0,5 vol-%, Benzene (CAS 71-43-2) < 0,1 %., n-hexane (CAS 110-54-3), <1 %, Identity outside the EU (CAS number and name of the substance):, 64742-48-9, Naphtha (petroleum), hydrotreated heavy., Previous EC number:, 265-150-3

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms are severe or persist.

Ingestion Do not induce vomiting. Get medical attention immediately.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.

Eye contact Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists after washing.

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

General information Repeated exposure may cause skin dryness or cracking. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

NESTE VALOPETROLI

Suitable extinguishing media	Water spray, foam, dry powder or carbon dioxide.
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

Specific hazards	Flammable liquid and vapour. Containers can burst violently or explode when heated, due to excessive pressure build-up.
Hazardous combustion products	Carbon dioxide (CO ₂). Carbon monoxide (CO).

5.3. Advice for firefighters

Protective actions during firefighting	Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Prevent fire extinguishing water from contaminating surface water or the ground water system.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid inhalation of vapours and contact with skin and eyes. Wear adequate protective equipment at all operations.
For non-emergency personnel	Keep upwind to avoid inhalation of gases, vapours, fumes and smoke.
For emergency responders	Prevent unauthorized access. Use only in well-ventilated areas.

6.2. Environmental precautions

Environmental precautions	Avoid release to the environment. Stop leak if safe to do so. Avoid the spillage or runoff entering drains, sewers or watercourses. Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air). Risk of soil and ground water contamination.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Immediately start clean-up of the liquid and contaminated soil. Large spills should be collected mechanically (remove by pumping) for disposal. Small Spillages: Absorb spillage with sand or other inert absorbent. Pay attention to the fire and health hazards caused by the product.
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6.4. Reference to other sections

Reference to other sections	For personal protection, see Section 8.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	This material is a static accumulator. Avoid heat, flames and other sources of ignition. Take precautionary measures against static discharges. All handling should only take place in well-ventilated areas. Try to avoid product volatilization during handling and transferring. Avoid inhalation of vapours and contact with skin and eyes. Use personal protective equipment and/or local ventilation when needed. Do not eat, drink or smoke when using this product. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. During tank operations follow special instructions (risk of oxygen displacement and hydrocarbons).
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7.2. Conditions for safe storage, including any incompatibilities

NESTE VALOPETROLI

Storage precautions Flammable liquid storage. Store in accordance with local regulations. Keep container tightly closed, in a cool, well ventilated place. Keep away from food, drink and animal feeding stuffs. Store in a demarcated bunded area to prevent release to drains and/or watercourses. Take precautions against leakage by constructing collecting pools and sewerage systems as well as by surfacing the loading and unloading stations. Suitable container materials: Stainless steel. Carbon steel. Polytetrafluoroethylene (PTFE, Teflon). Polypropene Polyethylene. Unsuitable container materials: Butyl rubber. Rubber (natural, latex). EPDM (ethylene-propylene-diene monomer). Polystyrene

7.3. Specific end use(s)

Specific end use(s) Not known.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Ingredient comments Solvent naphtha, group 1: 500 mg/m³ (8h), HTP 2016/FIN. The individual limit values can be applied for the hydrocarbons.

DNEL DNEL derivation is not justified.

PNEC Not available.

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

DNEL

- Workers - Inhalation; Long term systemic effects: 871 mg/m³
- Workers - Dermal; Long term systemic effects: 208 mg/kg/day
- Consumer - Inhalation; Long term systemic effects: 185 mg/m³
- Consumer - Dermal; Long term systemic effects: 125 mg/kg/day
- Consumer - Oral; Long term systemic effects: 125 mg/kg/day

8.2. Exposure controls

Appropriate engineering controls All handling should only take place in well-ventilated areas. Use personal protective equipment and/or local ventilation when needed. Handle in accordance with good industrial hygiene and safety practice.

Eye/face protection Tight-fitting safety glasses.

Hand protection Wear protective gloves. It is recommended that gloves are made of the following material: Nitrile rubber. Neoprene. The selected gloves should have a breakthrough time of at least 4 hours. Protection class 5. Protective gloves according to standards EN 420 and EN 374. Change protective gloves regularly.

Other skin and body protection Protective clothing when needed. Wear anti-static protective clothing if there is a risk of ignition from static electricity.

Respiratory protection Filter device/half mask Gas filter, type A2. 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 (< 19 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.

Environmental exposure controls Take precautions against leakage by constructing collecting pools and sewerage systems as well as by surfacing the loading and unloading stations.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance Mobile liquid.

NESTE VALOPETROLI

Colour	Clear.
Odour	Hydrocarbons. Mild.
Odour threshold	-
pH	-
Melting point	(Melting/pour point) < -15°C (ASTM D 5950)
Initial boiling point and range	159...230°C (EN ISO 3405)
Flash point	≥ 50°C (DIN 51755)
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: ~0,6 % (calculated) Upper flammable/explosive limit: ~7 % (calculated)
Vapour pressure	<0,3 kPa @ 20°C
Vapour density	> 3 (Air = 1.0)
Relative density	~ 0,8 @ 15/4°C (ISO 12185)
Solubility(ies)	The product has poor water-solubility. (~ 10 mg/l)
Partition coefficient	log Kow: > 3
Auto-ignition temperature	>200°C Estimated value.
Decomposition Temperature	-
Viscosity	Kinematic viscosity 1,3 - 2,5 mm ² /s @ 40°C (ASTM D 7042) Dynamic viscosity <50 mPa s @ 20°C
Explosive properties	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.
<u>9.2. Other information</u>	
Other information	Not known.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No potentially hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid Keep away from heat, sparks and open flame. Take precautionary measures against static discharges.

10.5. Incompatible materials

Materials to avoid Oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products None known.

NESTE VALOPETROLI

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects Based on available data the classification criteria are not met.

Skin corrosion/irritation

Skin corrosion/irritation Based on available data the classification criteria are not met. (OECD 404) Repeated exposure may cause skin dryness or cracking.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met. (OECD 405).

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met. (OECD 406).

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Genotoxicity - in vivo Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met. (OECD 453)

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met. (OECD 421, 422)

Reproductive toxicity - development Based on available data the classification criteria are not met. (OECD 414)

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met. (OECD 408, 413, 422)

Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

Toxicological information on ingredients.

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ > 5000 mg/kg, Oral, Rat (OECD 401, 423)

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 3000 mg/kg, Dermal, Rabbit LD₅₀ > 2000 mg/kg, Dermal, Rat (OECD 402)

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ > 5000 mg/m³, Inhalation, Rat (4h) (OECD 403)

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ > 5000 mg/kg, Oral, Rat (OECD 401, 423)

Acute toxicity - dermal

NESTE VALOPETROLI

Notes (dermal LD₅₀) LD₅₀ > 2000 mg/kg, Dermal, Rabbit (OECD 402)

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ > 4,95 mg/l, Inhalation, Rat (4h) Air. (OECD 403)

SECTION 12: Ecological Information

12.1. Toxicity

Toxicity Based on available data the classification criteria are not met.

Ecological information on ingredients.

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

Acute aquatic toxicity

Acute toxicity - fish LL₅₀, 96 hours: > 1000 mg/l,
LL0, 96 hours: 1000 mg/l,
(OECD 203)

Acute toxicity - aquatic invertebrates LL₅₀, 48 hours: > 1000 mg/l,
LL0, EL0, 48 hours: 1000 mg/l,
(OECD 202)
LL₅₀, 96 hours: > 1000 mg/l, Marine water
NOELR, 96 hours: 32 mg/l, Marine water
(EPA OPPTS 850.1020)

Acute toxicity - aquatic plants EL50, 72 hours: > 1000 mg/l, Algae
NOELR, 72 hours: 1000 mg/l, Algae
(OECD 201)

Acute toxicity - microorganisms EL50, 48 hours: > 1000 mg/l,
(QSAR)

Chronic aquatic toxicity

Chronic toxicity - fish early life stage NOELR, 28 days: 0,101 mg/l,
(QSAR)

Chronic toxicity - aquatic invertebrates NOELR, 21 days: 0,176 mg/l,
(QSAR)

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

Acute aquatic toxicity

Acute toxicity - fish LL₅₀, 96 hours: > 1000 mg/l,
LL0, 96 hours: 100 mg/l,
(OECD 203)

Acute toxicity - aquatic invertebrates EL50, 48 hours: > 1000 mg/l,
EL0, 48 hours: 1000 mg/l,
(OECD 202)

Acute toxicity - aquatic plants EL50, 72 hours: > 1000 mg/l, Algae
NOELR, 72 hours: 3 - 100 mg/l, Algae
(OECD 201)

Chronic aquatic toxicity

Chronic toxicity - fish early life stage NOELR, 28 days: 0,13 mg/l,
(QSAR)

NESTE VALOPETROLI

Chronic toxicity - aquatic invertebrates NOELR, 21 days: 0,23 mg/l, (QSAR)

12.2. Persistence and degradability

Phototransformation The product contains volatile substances which may spread in the atmosphere. Can be photodegraded in the atmosphere.

Stability (hydrolysis) No significant reaction in water.

Ecological information on ingredients.

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Biodegradation Rapidly degradable (OECD 301F)

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

Biodegradation Rapidly degradable (OECD 301F)

12.3. Bioaccumulative potential

Bioaccumulative potential No data available.

Partition coefficient log Kow: > 3

12.4. Mobility in soil

Mobility Evaporates slowly. Product can penetrate soil until reaching the surface of ground water. The product contains substances which are bound to particulate matter and are retained in soil.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Waste packaging should be collected for reuse or recycling.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 1993

14.2. UN proper shipping name

Proper shipping name (ADR/RID) UN 1993 FLAMMABLE LIQUID, N.O.S. (solvent naphtha)

14.3. Transport hazard class(es)

NESTE VALOPETROLI

ADR/RID class 3

14.4. Packing group

ADR/RID packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

Hazard Identification Number (ADR/RID) 30

Tunnel restriction code (D/E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Commission Regulation (EU) No 2015/830 of 28 May 2015.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

SECTION 16: Other information

Key literature references and sources for data Regulations, databases, literature, own research. Chemical Safety Report 2011.

Revision date 15/01/2018

Supersedes date 16/03/2015

SDS number 6017

Hazard statements in full H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H336 May cause drowsiness or dizziness.

Exposure scenario

Formulation & (Re)packing of Substances and Mixtures - Industrial

Identification

Product name	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, aromatics < 2%
REACH registration number	01-2119463258-33-0003
Version number	2010

1. Title of exposure scenario

Main title	Formulation & (Re)packing of Substances and Mixtures - Industrial
Process scope	Formulation, packing and re-packing of the substance and its mixtures in batch or continuous operations, including storage, materials transfers, mixing, tableting, compression, pelletisation, extrusion, large and small scale packing, sampling, maintenance and associated laboratory activities.
Main sector	SU3 Industrial uses
Sector of use	SU20 Health services
Environment	
Environmental release category	ERC2 Formulation of preparations.
SPERC	ESVOC SpERC 2.2.v1
Worker	
Process category	<p>PROC1 Use in closed process, no likelihood of exposure.</p> <p>PROC2 Use in closed, continuous process with occasional controlled exposure</p> <p>PROC3 Use in closed batch process (synthesis or formulation).</p> <p>PROC4 Use in batch and other process (synthesis) where opportunity for exposure arises.</p> <p>PROC5 Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact).</p> <p>PROC8a Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities.</p> <p>PROC8b Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities.</p> <p>PROC9 Transfer of substance or preparation into small containers (dedicated filling line, including weighing).</p> <p>PROC14 Production of preparations or articles by tableting, compression, extrusion, pelletisation.</p> <p>PROC15 Use as laboratory reagent.</p>

2. Conditions of use affecting exposure (Industrial - Environment 1)

Control of environmental exposure

No exposure assessment presented for the environment.

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid
Vapour pressure	Vapour pressure 0.5 - 10 kPa at STP.
Concentration details	Covers percentage substance in the product up to 100% (unless stated differently).

Formulation & (Re)packing of Substances and Mixtures - Industrial

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Other given operational conditions affecting workers exposure

Setting

Assumes a good basic standard of occupational hygiene is implemented.

Temperature

Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Risk management measures

General exposures (closed systems)

Handle substance within a closed system.

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General exposures (open systems)

No other specific measures identified.

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Batch processes at elevated temperatures

Operation is carried out at elevated temperature (> 20°C above ambient temperature).

Formulate in enclosed or ventilated mixing vessels.

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Process sampling

No other specific measures identified.

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Laboratory activities

No other specific measures identified.

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Bulk transfers

No other specific measures identified.

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Mixing operations

(open systems)

No other specific measures identified.

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Transfer from/pouring from containers

Manual

No other specific measures identified.

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Drum/batch transfers

No other specific measures identified.

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Production of preparations or articles by tableting, compression, extrusion, pelletisation

No other specific measures identified.

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Drum and small package filling

No other specific measures identified.

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Equipment cleaning and maintenance

No other specific measures identified.

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Storage

Store substance within a closed system.

3. Exposure estimation (Health 1)

Assessment method

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated

Formulation & (Re)packing of Substances and Mixtures - Industrial

Available hazard data do not enable the derivation of a DNEL for dermal irritant effects.
Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure scenario

Uses in Coatings - Industrial

Identification

Product name	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, aromatics < 2%
REACH registration number	01-2119463258-33-0003
Version number	2010

1. Title of exposure scenario

Main title	Uses in Coatings - Industrial
Process scope	Covers the use in coatings (paints, inks, adhesives, etc.), including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, spreader, dip, flow, fluidised bed on production lines and film formation) and equipment cleaning, maintenance and associated laboratory activities.
Main sector	SU3 Industrial uses
Environment	
Environmental release category	ERC4 Industrial use of processing aids in processes and products, not becoming part of articles.
SPERC	ESVOC SpERC 4.3a.v1
Worker	
Process category	<p>PROC1 Use in closed process, no likelihood of exposure.</p> <p>PROC2 Use in closed, continuous process with occasional controlled exposure</p> <p>PROC3 Use in closed batch process (synthesis or formulation).</p> <p>PROC4 Use in batch and other process (synthesis) where opportunity for exposure arises.</p> <p>PROC5 Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact).</p> <p>PROC7 Spraying in industrial settings and applications.</p> <p>PROC8a Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities.</p> <p>PROC8b Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities.</p> <p>PROC9 Transfer of substance or preparation into small containers (dedicated filling line, including weighing).</p> <p>PROC10 Roller application or brushing of adhesive and other coating.</p> <p>PROC13 Treatment of articles by dipping and pouring.</p> <p>PROC14 Production of preparations or articles by tableting, compression, extrusion, pelletisation.</p> <p>PROC15 Use as laboratory reagent.</p>

2. Conditions of use affecting exposure (Industrial - Environment 1)

Control of environmental exposure

No exposure assessment presented for the environment.

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid
Vapour pressure	Vapour pressure 0.5 - 10 kPa at STP.

Uses in Coatings - Industrial

Concentration details Covers percentage substance in the product up to 100% (unless stated differently).

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Other given operational conditions affecting workers exposure

Setting Assumes a good basic standard of occupational hygiene is implemented.

Temperature Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Risk management measures

Uses in Coatings - Industrial

General exposures (closed systems)

Handle substance within a closed system.

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General exposures (closed systems)

With sample collection

Handle substance within a closed system.

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Film formation - force drying, stoving and other technologies

Operation is carried out at elevated temperature (> 20°C above ambient temperature).

Handle substance within a closed system.

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Mixing operations

(closed systems)

General exposures (closed systems)

Handle substance within a closed system.

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Film formation - air drying

No other specific measures identified.

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Preparation of material for application

Mixing operations

(open systems)

No other specific measures identified.

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Spraying (automatic/robotic)

No other specific measures identified.

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Manual spraying

No other specific measures identified.

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Material transfers

No other specific measures identified.

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Roller, spreader, flow application

No other specific measures identified.

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Dipping, immersion and pouring

No other specific measures identified.

.

Laboratory activities

No other specific measures identified.

.

Material transfers

Drum/batch transfers

Transfer from/pouring from containers

No other specific measures identified.

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Production of preparations or articles by tableting, compression, extrusion, pelletisation

No other specific measures identified.

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Equipment cleaning and maintenance

No other specific measures identified.

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Storage

No other specific measures identified.

Uses in Coatings - Industrial

3. Exposure estimation (Health 1)

Assessment method

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated

Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure scenario

Uses in Coatings - Professional

Identification

Product name	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, aromatics < 2%
REACH registration number	01-2119463258-33-0003
Version number	2010

1. Title of exposure scenario

Main title	Uses in Coatings - Professional
Process scope	Covers the use in coatings (paints, inks, adhesives, etc.), including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, brush, spreader by hand or similar methods and film formation) and equipment cleaning, maintenance and associated laboratory activities.
Main sector	SU22 Professional uses
Environment	
Environmental release category	ERC8a Wide dispersive indoor use of processing aids in open systems. ERC8d Wide dispersive outdoor use of processing aids in open systems.
SPERC	ESVOC SpERC 8.3b.v1
Worker	
Process category	PROC1 Use in closed process, no likelihood of exposure. PROC2 Use in closed, continuous process with occasional controlled exposure PROC3 Use in closed batch process (synthesis or formulation). PROC4 Use in batch and other process (synthesis) where opportunity for exposure arises. PROC5 Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact). PROC8a Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities. PROC8b Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities. PROC10 Roller application or brushing of adhesive and other coating. PROC11 Spraying outside industrial settings and/or applications. PROC13 Treatment of articles by dipping and pouring. PROC15 Use as laboratory reagent. PROC19 Hand-mixing with intimate contact and only PPE available.

2. Conditions of use affecting exposure (Industrial - Environment 1)

Control of environmental exposure

No exposure assessment presented for the environment.

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid
Vapour pressure	Vapour pressure 0.5 - 10 kPa at STP.
Concentration details	Covers percentage substance in the product up to 100% (unless stated differently).
<u>Frequency and duration of use</u>	

Uses in Coatings - Professional

Covers daily exposures up to 8 hours (unless stated differently).

Other given operational conditions affecting workers exposure

Setting Assumes a good basic standard of occupational hygiene is implemented.

Temperature Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Risk management measures

General exposures (closed systems)

Handle substance within a closed system.

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Filling/preparation of equipment from drums or containers.

Use in contained systems

Handle substance within a closed system.

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Preparation of material for application

Use in contained batch processes

No other specific measures identified.

.

Film formation - air drying

Indoor/outdoor use.

No other specific measures identified.

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Preparation of material for application

Indoor/outdoor use.

No other specific measures identified.

.

Material transfers

Drum/batch transfers

No other specific measures identified.

.

Roller, spreader, flow application

Indoor/outdoor use.

No other specific measures identified.

.

Manual spraying

Indoor/outdoor use.

No other specific measures identified.

.

Dipping, immersion and pouring

Indoor/outdoor use.

No other specific measures identified.

.

Laboratory activities

No other specific measures identified.

.

Hand application - fingerpaints, pastels, adhesives

Indoor/outdoor use.

No other specific measures identified.

3. Exposure estimation (Health 1)

Assessment method

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated

Uses in Coatings - Professional

Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure scenario

Use as a Fuel - Industrial

Identification

Product name	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, aromatics < 2%
REACH registration number	01-2119463258-33-0003
Version number	2010

1. Title of exposure scenario

Main title	Use as a Fuel - Industrial
Process scope	Covers the use as a fuel (or fuel additive) and includes activities associated with its transfer, use, equipment maintenance and handling of waste.
Main sector	SU3 Industrial uses
Environment	
Environmental release category	ERC7 Industrial use of substances in closed systems.
SPERC	ESVOC SpERC 7.12a.v1
Worker	
Process category	<p>PROC1 Use in closed process, no likelihood of exposure.</p> <p>PROC2 Use in closed, continuous process with occasional controlled exposure</p> <p>PROC3 Use in closed batch process (synthesis or formulation).</p> <p>PROC8a Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities.</p> <p>PROC8b Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities.</p> <p>PROC16 Using material as fuel sources, limited exposure to unburned product to be expected.</p>

2. Conditions of use affecting exposure (Industrial - Environment 1)

Control of environmental exposure

No exposure assessment presented for the environment.

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid
Vapour pressure	Vapour pressure 0.5 - 10 kPa at STP.
Concentration details	Covers percentage substance in the product up to 100% (unless stated differently).

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Other given operational conditions affecting workers exposure

Setting	Assumes a good basic standard of occupational hygiene is implemented.
Temperature	Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Risk management measures

Use as a Fuel - Industrial

Bulk transfers

No other specific measures identified.

.

Drum/batch transfers

No other specific measures identified.

.

General exposures (closed systems)

Handle substance within a closed system.

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Use as a fuel

Handle substance within a closed system.

.

Equipment cleaning and maintenance

No other specific measures identified.

.

Storage

Store substance within a closed system.

3. Exposure estimation (Health 1)

Assessment method

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated

Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure scenario

Use as a Fuel - Professional

Identification

Product name	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, aromatics < 2%
REACH registration number	01-2119463258-33-0003
Version number	2010

1. Title of exposure scenario

Main title	Use as a Fuel - Professional
Process scope	Covers the use as a fuel (or fuel additive) and includes activities associated with its transfer, use, equipment maintenance and handling of waste.
Main sector	SU22 Professional uses
Environment	
Environmental release category	ERC9a Wide dispersive indoor use of substances in closed systems. ERC9b Wide dispersive outdoor use of substances in closed systems.
SPERC	ESVOC SpERC 9.12b.v1
Worker	
Process category	PROC1 Use in closed process, no likelihood of exposure. PROC2 Use in closed, continuous process with occasional controlled exposure PROC3 Use in closed batch process (synthesis or formulation). PROC8a Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities. PROC8b Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities. PROC16 Using material as fuel sources, limited exposure to unburned product to be expected.

2. Conditions of use affecting exposure (Industrial - Environment 1)

Control of environmental exposure

No exposure assessment presented for the environment.

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid
Vapour pressure	Vapour pressure 0.5 - 10 kPa at STP.
Concentration details	Covers percentage substance in the product up to 100% (unless stated differently).

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Other given operational conditions affecting workers exposure

Setting	Assumes a good basic standard of occupational hygiene is implemented.
Temperature	Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Risk management measures

Use as a Fuel - Professional

Bulk transfers
Dedicated facility
No other specific measures identified.
.
Drum/batch transfers
No other specific measures identified.
.
Refuelling
No other specific measures identified.
.
General exposures (closed systems)
Handle substance within a closed system.
.
Use as a fuel
(closed systems)
No other specific measures identified.
.
Equipment cleaning and maintenance
No other specific measures identified.
.
Storage
Store substance within a closed system.

3. Exposure estimation (Health 1)

Assessment method

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated

Available hazard data do not enable the derivation of a DNEL for dermal irritant effects.
Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure scenario

Use as a fuel (home space heaters) - Consumer

Identification

Product name	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, aromatics < 2%
REACH registration number	01-2119463258-33-0003
Version number	2010
Es reference	Neste_VP

1. Title of exposure scenario

Main title	Use as a fuel (home space heaters) - Consumer
Process scope	Covers consumer uses in liquid fuels.
Product category	PC13_6 Liquid: home space heater fuel PC13_6 Liquid: home space heater fuel
Main sector	SU21 Consumer uses
<u>Environment</u>	
Environmental release category	ERC9a Wide dispersive indoor use of substances in closed systems. ERC9b Wide dispersive outdoor use of substances in closed systems.
SPERC	ESVOC SpERC 9.12c.v1

2. Conditions of use affecting exposure (Non-industrial - Environment 1)

Control of environmental exposure (Non-industrial)

No exposure assessment presented for the environment.

2. Conditions of use affecting exposure (Non-industrial - Health 1)

Product characteristics

Physical state	Liquid
Vapour pressure	1300 Pa
Concentration details	Covers percentage substance in the product up to 100% (unless stated differently).

Amounts used

PC13_6 Liquid: home space heater fuel
For each use event, covers use amounts up to 3000 g.

Frequency and duration of use

PC13_6 Liquid: home space heater fuel
Covers use up to 1 time(s)/day.
Covers exposure up to 0.03 hours per event.
Covers use up to 365 days/year.

Human factors not influenced by risk management

Potentially exposed body parts	Covers skin contact area up to 210.00 cm ² . Unless otherwise stated.
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Other given operational conditions affecting Non-industrial exposure

Setting	Covers outdoor use. Unless otherwise stated.
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Use as a fuel (home space heaters) - Consumer

Temperature	Assumes activities are at ambient temperature (unless stated differently).
Room size	PC13_6 Liquid: home space heater fuel : Covers use under typical household ventilation. Covers use in room size of 20 m ³ .

Other given operational conditions affecting Non-industrial exposure

No specific risk management measure identified beyond those operational conditions stated.

3. Exposure estimation (Health 1)

Assessment method	The ECETOC TRA tool has been used to estimate consumer exposures, unless otherwise indicated. Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Qualitative approach used to conclude safe use.
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4. Guidance to check compliance with the exposure scenario (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.