

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

1.1. Product identifier

Product form	: Substance
Trade name	: RADIA 7610
Chemical name	: Propane-1,2,3-triyl 2-ethylhexanoate
IUPAC name	: Propane-1,2,3-triyl 2-ethylhexanoate
EC no.	: 230-896-0
CAS No.	: 7360-38-5
REACH number	: 1907/2006/EC: not registered (supplies only < 1tpa).
C&L notification reference no	: 02-2119953263-39-0000

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

Relevant identified uses

Main use category	: Industrial use
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1.3. Details of the supplier of the safety data sheet

OLEON N.V.
Assenedestraat 2
BE 9940 Ertvelde
Belgium
T +32 9 341 10 11, F +32 9 341 10 00
sds@oleon.com, www.oleon.com

1.4. Emergency telephone number

Emergency number	: 24/7 EMERGENCY NUMBER (SGS ERS; Oleon contract nr 76858) +32 3 575 55 55 (worldwide); +1 888 765 6554 (USA tollfree)
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Country/Area	Organisation/Company	Address	Emergency number	Comment
	World directory of poisons centres (Yellow Tox) WHO-OMS	Website	http://www.who.int/gho/phe/chemical_safety/poisons_centres/en/	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazardous to the aquatic environment – Chronic Hazard, H412
Category 3
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Signal word (CLP) : -
Hazard statements (CLP) : H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP) : P273 - Avoid release to the environment.
P501 - Dispose of contents and container to an approved waste disposal plant.

2.3. Other hazards

Other hazards which do not result in classification : None under normal conditions.

The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Propane-1,2,3-triyl 2-ethylhexanoate	CAS No.: 7360-38-5 EC no.: 230-896-0	100	Aquatic Chronic 3, H412

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.
First-aid measures after inhalation : Remove victim to fresh air. Respiratory problems: consult a doctor/medical service.
First-aid measures after skin contact : Wash off immediately with soap and plenty of water. If irritation persists, consult a doctor.
First-aid measures after eye contact : Rinse immediately with plenty of water. Consult an ophthalmologist if irritation persists.
First-aid measures after ingestion : Rinse mouth out with water. Get medical advice/attention if you feel unwell.

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

Symptoms/effects : Unlikely.

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

No supplementary information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : AFFF foam. BC-powder. Carbon dioxide. Dry sand. Dry chemical powder. Use the extinguishing media recommended for the burning materials and fire situation.
- Unsuitable extinguishing media : Do not use water jet.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : DIRECT FIRE HAZARD: Combustible. INDIRECT FIRE HAZARD: Heating may cause a fire or explosion. Temperature above flashpoint: higher fire/explosion hazard.
- Explosion hazard : No direct explosion hazard.
- Reactivity in case of fire : On burning: release of carbon monoxide/carbon dioxide.

5.3. Advice for firefighters

- Other information : No supplementary information available.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Mark the danger area. Exposure to fire/heat: have neighbourhood close doors and windows. Exposure to fire/heat: consider evacuation. Wash contaminated clothing before reuse.

For non-emergency personnel

- Protective equipment : See "Material-Handling" to select protective clothing.

For emergency responders

- Protective equipment : For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Prevent soil and water pollution.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Clean contaminated surfaces with a soap solution. Flush/dilute with water. Take up liquid spill into absorbent material, e.g.: sand, earth, vermiculite or powdered limestone.
- Other information : No supplementary information available.

6.4. Reference to other sections

Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Handling temperature : ≥ 10 °C above melting point

7.2. Conditions for safe storage, including any incompatibilities

- Information on mixed storage : No supplementary information available.
- Storage area : Keep container in a well-ventilated place. Store at ambient temperature. Keep out of direct sunlight. Meet the legal requirements.
- Special rules on packaging : Store in a closed container. Suitably labelled. Meet the legal requirements.

Packaging materials : No supplementary information available.

Switzerland

Storage class (LK) : LK 10/12 - Liquids

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL and PNEC

RADIA 7610 (7360-38-5)

PNEC (Water)

PNEC aqua (freshwater) 0.021 mg/l

PNEC aqua (marine water) 0.0021 mg/l

PNEC (Sediment)

PNEC sediment (freshwater) 1211356 mg/kg dwt

PNEC sediment (marine water) 1211356 mg/kg dwt

PNEC (Soil)

PNEC soil 2422588 mg/kg dwt

PNEC (STP)

PNEC sewage treatment plant 100 mg/l

8.2. Exposure controls

Personal protection equipment

Personal protective equipment:

Gloves. Protective clothing. Safety glasses.

Personal protective equipment symbol(s):



Skin protection

Other skin protection

Materials for protective clothing:

Good resistance: Nitrile rubber

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : Colourless to yellow.
Appearance (room temperature) : Liquid.

Molecular mass	: 470.68 g/mol
Odour	: Sweet. characteristic.
Odour threshold	: Not available
Melting point	: < -40 °C
Freezing point	: Not available
Boiling point	: > 220 °C
HMIS Flammability	: Not available
Explosive properties	: Product is not explosive.
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: 218 °C (ASTM D92)
Auto-ignition temperature	: > 300 °C
Decomposition temperature	: Flash point
pH	: 5 – 8
Viscosity, kinematic	: 16.2 mm ² /s (40°C)
Solubility	: Water: < 0.05 mg/l (20°C, pH 6.1 to 6.4; column elution; EU A.6.; ECHA website)
Partition coefficient n-octanol/water (Log Kow)	: Not available
Partition coefficient n-octanol/water (Log Pow)	: > 5
Vapour pressure	: 0.00000007 Pa Temp.: 20 °C
Vapour pressure at 50 °C	: Not available
Density	: 0.90 to 1.0
Relative density	: 0.95 Source: National Institute of Technology and Evaluation
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

Other safety characteristics

VOC content	: < 1 % (1999/13/EC; 2004/42/EC; 2010/75/EU; SR 814.018)
Other properties	: Oily, Soluble in oils/fats, Soluble in most organic solvents, Insoluble in water

SECTION 10: Stability and reactivity

10.1. Reactivity

On burning: release of carbon monoxide/carbon dioxide.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No supplementary information available.

10.5. Incompatible materials

No supplementary information available.

10.6. Hazardous decomposition products

No supplementary information available.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

RADIA 7610 (7360-38-5)

LD50 oral rat	> 5000 mg/kg Non-toxic
LD50 dermal rat	> 2000 mg/kg (Source: ECHA_API)
LC50 Inhalation - Rat	> 1.86 mg/l (Exposure time: 6 h Source: ECHA_API)

Skin corrosion/irritation	: Not classified pH: 5 – 8
Serious eye damage/irritation	: Not classified pH: 5 – 8
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

RADIA 7610 (7360-38-5)

NOAEL (oral, rat, 90 days)	≥ 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents), Guideline: other:, Guideline: EU Method B.7 (Repeated Dose (28 Days) Toxicity (Oral))
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Aspiration hazard	: Not classified
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RADIA 7610 (7360-38-5)

Viscosity, kinematic	16.2 mm ² /s (40°C)
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11.2. Information on other hazards

Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties	: The substance/mixture has no endocrine disrupting properties.
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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Ecology - air	: No supplementary information available.
Ecology - water	: No bioaccumulation data available
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Harmful to aquatic life with long lasting effects.

RADIA 7610 (7360-38-5)

LC50 - Fish [1]	> 100 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 72h - Algae [1]	> 0.31 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	≥ 0.1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

RADIA 7610 (7360-38-5)

Persistence and degradability	Rapidly degradable
Biodegradation	> 70 % (OECD 301B; NICNAS "Unilever 1994")

12.3. Bioaccumulative potential

RADIA 7610 (7360-38-5)

Partition coefficient n-octanol/water (Log Pow)	> 5
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12.4. Mobility in soil

RADIA 7610 (7360-38-5)

Mobility in soil	5.761 Source: Quantitative Structure Activity Relation
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12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

RADIA 7610 (7360-38-5)

Other information	No supplementary information available
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal : Prevent dispersion by covering with dry absorbent,Scoop solid spill into closing containers,Scoop absorbed substance into closing containers,Clean contaminated surfaces with an excess of water and soap solution,Wash clothing and equipment after handling

Regional waste regulation : No supplementary information available.

Ecological waste information : Do not discharge into drains or the environment. Remove to an authorized waste treatment plant.

European List of Waste (LoW, EC 2000/532) : No supplementary information available

HP Code : HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Marine pollutant: no				

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

Council Regulation (EC) for the control of dual-use items

Not listed on the COUNCIL REGULATION (EC) of dual-use items.

VOC Directive (2004/42)

VOC content : < 1 % (1999/13/EC; 2004/42/EC; 2010/75/EU; SR 814.018)

Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

National regulations

Chemical inventories	:	Compliant with AICIS, ECST, IECSC, Japan ENCS, Japan ISHL, KECL, NCI, NDSL, NZIoC, PICCS, TCSI, TECI_DIW, TECI_FDA, TR EAEU, TSCA
KKDIK number (Turkey)	:	not preregistered
K-REACH (Korea)	:	preregistered
UK-REACH (Great Britain)	:	No DUIN maintained (max.1tpa)
Swiss ChemO (SR 813.11)	:	This substance is not subject to the obligation to register pursuant to art.61 of the Chemicals Ordinance (ChemO)

Germany

VOC ordinance (ChemVOCFarbV)	:	VOC content	:	< 1 % (1999/13/EC; 2004/42/EC; 2010/75/EU; SR 814.018)
		Maximum content of VOC	:	0.00 g/l
Employment restrictions	:	Observe restrictions according Act on the Protection of Working Mothers (MuSchG). Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).		
Water hazard class (WGK)	:	WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 4291).		
Override matching entry (12. BImSchV)	:	Is not subject to the Major Accidents Ordinance (12. BImSchV)		

Netherlands

ABM category	:	A(3) - hazardous for aquatic organisms, may have longterm hazardous effects in aquatic environment
SZW-lijst van kankerverwekkende stoffen	:	The substance is not listed
SZW-lijst van mutagene stoffen	:	The substance is not listed
SZW-lijst van reprotoxische stoffen – Borstvoeding	:	The substance is not listed

SZW-lijst van reprotoxische stoffen – : The substance is not listed

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Training advice : No supplementary information available.

Chem. inventories legend : AICIS = Australian Inventory of Industrial Chemicals
ECST = Existing Chemical Substances Inventory of Taiwan
IECSC = Inventory of Existing Chemicals Substances in China
Japan ENCS = Japanese Existing Chemical Substances (ISHL)
Japan ISHL = Japanese Existing and New Chemical Substances (CSCL)
KECL = Korean Existing Chemical List
NCI = National Chemical Inventory
NDSL = Canadian Non Domestic Substances List
NZIoC = New Zealand Inventory of Chemicals
PICCS = Philippines Inventory of Chemicals and Chemical Substances
TCSI = Taiwan Chemical Substance Inventory
TECI_DIW = Thailand Existing Chemicals Inventory - Department of Industrial Works List
TECI_FDA = Thailand Existing Chemicals Inventory - Food and Drug Administration List
TR EAEU = Eurasian Economic Union Unified list of chemicals
TSCA = USA Toxic Substances Control Act

SDS changed sections : 15 - Regulatory information

SDS Reason for revision : No supplementary information available

Other information : No supplementary information available.

Full text of H- and EUH-statements:

Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
H412	Harmful to aquatic life with long lasting effects.

The classification complies with : ATP 12

SDS EU Oleon Annex II

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.