RADIACID 1134

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
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Issue date: 29/01/2023 Revision date: 20/12/2022 Supersedes version of: 20/12/2022 Version: 1.2

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

1.1. Product identifier

Product form	:	Substance
Trade name	:	RADIACID 1134
IUPAC name	:	Oleic acid
EC no.	:	204-007-1
CAS No.	:	112-80-1
REACH registration No	:	1907/2006/EC Annex V.9
C&L notification reference no	:	not applicable (non classified; Annex V)
Label name	:	oleic acid

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

1.2.1. Relevant identified uses

Main use category : Industrial use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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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)

Country	Official advisory body	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]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

No labelling applicable

2.3. Other hazards

No additional information available

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]
Oleic acid	CAS No.: 112-80-1 EC no.: 204-007-1 REACH-no: 1907/2006/EC Annex V.9	80 – 85	Not classified

3.2. Mixtures

Not applicable

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 for 15 minutes. Consult an ophtalmologist if irritation persists.

First-aid measures after ingestion : Rinse mouth thoroughly with water. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects : No supplementary information available.

Symptoms/effects after inhalation : On heating: Irritation of the respiratory tract.

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 a water jet since it may cause the fire to spread.

5.2. Special hazards arising from the substance or mixture

Fire hazard : DIRECT FIRE HAZARD: Combustible. INDIRECT FIRE HAZARD: Heating increases the fire hazard. Temperature above flashpoint: higher fire/explosion hazard.

Explosion hazard : DIRECT EXPLOSION HAZARD: Fine dust dispersed in air may ignite. INDIRECT EXPLOSION HAZARD: Dust cloud can be ignited by a spark.

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. Caution : this product can cause the floor to be slippery. Wash contaminated clothing before reuse. In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.

6.1.1. For non-emergency personnel

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

6.1.2. 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. Do not allow product to spread into the environment.

6.3. Methods and material for containment and cleaning up

For containment : Knock down/dilute dust cloud with water spray.

Methods for cleaning up : Spills of this product present a serious slipping hazard. If melted: allow liquid to solidify before taking it up. Sweep or shovel spills into appropriate container for disposal. Clean contaminated surfaces with a soap solution. Flush/dilute with water. Clear up spills immediately and dispose of waste safely.

Other information : No supplementary information available.

6.4. Reference to other sections

For further information refer to 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 : KEEP AWAY FROM: Acids. strong acids. bases. strong bases.

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 : Suitable materials for containers. Aluminium. Glass. Stainless steel. Do not store in corrodable metal.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:
Gloves. Protective clothing. Safety glasses.

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

No additional information available

8.2.2.2. Skin protection

Other skin protection

Materials for protective clothing:
Good resistance: Nitrile rubber

8.2.2.3. Respiratory protection

No additional information available

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Light yellow to dark yellow.
Appearance (room temperature)	:	Liquid.
Odour	:	Characteristic. Mild odor.
Odour threshold	:	Not available
Melting point	:	ca. 15 °C
Freezing point	:	Not available
Boiling point	:	> 200 °C
HMIS Flammability	:	Not available
Explosive limits	:	Not available
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	192 °C (ASTM D92)
Auto-ignition temperature	:	ca. 345 °C
Decomposition temperature	:	> 300 °C
pH	:	< 7
Viscosity, kinematic	:	19.058 mm^2/s
Viscosity, dynamic	:	17 mPa.s (40°C)
Solubility	:	Water: < 0.005 g/100ml (25°C)
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Partition coefficient n-octanol/water (Log Pow)	:	> 5 (est.)
Vapour pressure	:	< 0.01 hPa (20°C)
Vapour pressure at 50 °C	:	Not available
Density	:	892 kg/m^3 (20°C)
Relative density	:	Not available
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

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

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

RADIACID 1134 (112-80-1)	
LD50 oral rat	> 2000 mg/kg Non-toxic

Skin corrosion/irritation : Not classified
pH: < 7

Serious eye damage/irritation : Not classified
pH: < 7

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
Aspiration hazard : Not classified

RADIACID 1134 (112-80-1)	
Viscosity, kinematic	19.058 mm^2/s

11.2. Information on other hazards

No additional information available

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) : Not classified

12.2. Persistence and degradability

RADIACID 1134 (112-80-1)	
ThOD	2.9 g O2/g substance

12.3. Bioaccumulative potential

RADIACID 1134 (112-80-1)	
Partition coefficient n-octanol/water (Log Pow)	> 5 (est.)

12.4. Mobility in soil

RADIACID 1134 (112-80-1)	
Surface tension	ca. 0.03 N/m (20°C)

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal : No supplementary information available

Regional legislation (waste) : No supplementary information available.

Ecology - waste materials : Do not discharge into drains or the environment. Remove to an authorized waste treatment plant.

European List of Waste (LoW) code : No supplementary information available

SECTION 14: Transport information

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

14.1. UN number or ID number

UN-No. (ADR) : Not applicable

UN-No. (IMDG) : Not applicable

UN-No. (IATA) : Not applicable

UN-No. (ADN) : Not applicable

UN-No. (RID) : Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable

Proper Shipping Name (IMDG)	:	Not applicable
Proper Shipping Name (IATA)	:	Not applicable
Proper Shipping Name (ADN)	:	Not applicable
Proper Shipping Name (RID)	:	Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	:	Not applicable

IMDG

Transport hazard class(es) (IMDG)	:	Not applicable

IATA

Transport hazard class(es) (IATA)	:	Not applicable

ADN

Transport hazard class(es) (ADN)	:	Not applicable

RID

Transport hazard class(es) (RID)	:	Not applicable

14.4. Packing group

Packing group (ADR)	:	Not applicable
Packing group (IMDG)	:	Not applicable
Packing group (IATA)	:	Not applicable
Packing group (ADN)	:	Not applicable
Packing group (RID)	:	Not applicable

14.5. Environmental hazards

Dangerous for the environment	:	No
Marine pollutant	:	No
Other information	:	No supplementary information available

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

15.1.1. 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 (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

VOC Directive (2004/42)

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

Explosives Precursors Regulation (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 (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)

15.1.2. National regulations

Chemical inventories : Compliant with AIIC, DSL, EAEU, ECST, ENCS, EU REACh, IECSC, INSQ, ISHL, KECL, NZIoC, PICCS, TECI, TSCA, VNCI

KKDIK number (Turkey) : KKDIK Annex V.9

K-REACh (Korea) : exempted from (pre)registration according to K-REACh Appendix 1.4

UK-REACh (Great Britain) : exempted from registration

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

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 659).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

ABM category : B(4) - low hazard for aquatic organisms

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

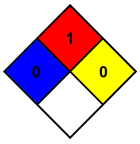
Switzerland

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

15.2. Chemical safety assessment

No chemical safety assessment needed: the substance is not classified and exempt from Regulation EC No 1907/2006 (REACh) under Annex V, point 9.

SECTION 16: Other information

Training advice	:	No supplementary information available.
Chem. inventories legend	:	AIIC = Australian Inventory of Industrial Chemicals DSL = Canadian Domestic Sustances List EAEU = Eurasian Economic Union Unified list of chemicals ECST = Existing Chemical Substances Inventory of Taiwan ENCS = Japanese Existing and New Chemicals Substances List EU REACh = European Union REACH Regulation 1907/2006 IECSC = Inventory of Existing Chemicals Substances in China INSQ = Mexico National Inventory of Chemical Substance ISHL = Japanese Industrial Safety and Health Law Substances KECL = Korean Existing Chemical List NZIoC = New Zealand Inventory of Chemicals PICCS = Philippine Inventory of Chemicals and Chemical Substances TECI = Thailand FDA Existing Chemicals Inventory TSCA (Active) = USA Toxic Substances Control Act VNCI = Vietnam National Chemicals Inventory
SDS changed sections	:	9 - Physical and chemical properties
SDS Reason for revision	:	No supplementary information available
NFPA health hazard	:	0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.
NFPA fire hazard	:	1 - Materials that must be preheated before ignition can occur.
NFPA reactivity	:	0 - Material that in themselves are normally stable, even under fire conditions.
NFPA image	:	
Other information	:	No supplementary information available.

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.