

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form	: Mixture
Trade name	: RADIAMULS MS 2800K
REACH number	: all the ingredients of this product in the scope of Regulation 1907/2006/EC (REACH), if not exempted, have been registered.
C&L notification reference no	: all the ingredients of this product in the scope of Regulation 1272/2008/EC (CLP), if not exempted, have been notified to the C&L Inventory.
Label name	: Blend of food emulsifiers

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
Industrial/Professional use spec.	: Wide dispersive use
Use of the substance/mixture	: Fit for use in foodstuffs

1.2.2. Uses advised against

No additional information available

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	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

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

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) 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 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Glycerides, C16-18 mono- and di-	CAS No.: 85251-77-0 EC no.: 286-490-9 REACH-no: 01-2119495562-30	≥ 80	Not classified
Sorbitan monooleate, ethoxylated	CAS No.: 9005-65-6 EC no.: polymer	≤ 20	Not classified

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 ophtalmologist if irritation persists.
First-aid measures after ingestion	: Rinse mouth out with water. Get medical advice/attention if you feel unwell. Call a poison center (www.who.int/ipcs/poisons/centre/directory/en).

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

Symptoms/effects : No supplementary information available.

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 : Solid water jet ineffective as extinguishing medium.

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 : 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.

6.1.1. For non-emergency personnel

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

6.1.2. For emergency responders

- Protective equipment : Use protective measures listed in Section 8.

6.2. Environmental precautions

- Prevent soil and water pollution.

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

- Handle waste materials in accordance with the provisions of 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 : Store at a temperature $< 18^{\circ}\text{C}$ (above 18°C enhanced caking may occur). Store in a well-ventilated place. 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.

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	: Solid
Colour	: Yellow.
Appearance (room temperature)	: Solid.
Odour	: Characteristic. Sweet odour.
Odour threshold	: Not available
Melting point	: $\approx 55\text{ }^{\circ}\text{C}$
Freezing point	: Not available
Boiling point	: $> 150\text{ }^{\circ}\text{C}$
HMIS Flammability	: Not available
Explosive properties	: Predicted negative.
Explosive limits	: Not applicable
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: $> 120\text{ }^{\circ}\text{C}$
Auto-ignition temperature	: $> 250\text{ }^{\circ}\text{C}$
Decomposition temperature	: $> \text{Flash point}$
pH	: 5 – 8
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: $\approx 36\text{ cP}$ (65°C)
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: $< 0.01\text{ hPa}$ (20°C)
Vapour pressure at $50\text{ }^{\circ}\text{C}$	: Not available
Density	: ca. 0.95
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available
Particle size distribution	: Not available
Particle shape	: Not available
Particle aspect ratio	: Not available
Particle aggregation state	: Not available
Particle agglomeration state	: Not available
Particle specific surface area	: Not available
Particle dustiness	: Not available

Sorbitan monooleate, ethoxylated

Vapour pressure	No supplementary information available
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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	: not determined (1999/13/EC; 2004/42/EC; 2010/75/EU)
Other properties	: Insoluble 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

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LD50 oral rat	> 2000 mg/kg Non-toxic
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Glycerides, C16-18 mono- and di- (85251-77-0)

LD50 oral rat	> 5000 mg/kg Non-toxic
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Sorbitan monooleate, ethoxylated (9005-65-6)

LD50 oral rat	> 5000 mg/kg Non-toxic
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Skin corrosion/irritation : Not classified
pH: 5 – 8

Glycerides, C16-18 mono- and di- (85251-77-0)

pH	5 – 8
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Serious eye damage/irritation : Not classified
pH: 5 – 8

Glycerides, C16-18 mono- and di- (85251-77-0)

pH	5 – 8
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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

Glycerides, C16-18 mono- and di- (85251-77-0)

Viscosity, kinematic	≈ 14 mm ² /s (100°C)
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Sorbitan monooleate, ethoxylated (9005-65-6)

Viscosity, kinematic	ca. 224 mm ² /s @40°C
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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

No additional information available

12.3. Bioaccumulative potential

Glycerides, C16-18 mono- and di- (85251-77-0)

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

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Ecology - soil	Biodegradability in soil: no data available.
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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	: 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 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 : 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****15.1.1. EU-Regulations****REACH Annex XVII (Restriction List)**

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

VOC Directive (2004/42)

VOC content : not determined (1999/13/EC; 2004/42/EC; 2010/75/EU)

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, ISHL, KECL, NZIoC, PICCS, TSCA, VNCI
KKDIK number (Turkey)	: all the ingredients of this product in the scope of KKDIK, if not exempted, have been (pre-)registered.
K-REACH (Korea)	: all the ingredients of this product in the scope of K-REACH, if not exempted, have been (pre-)registered.
UK-REACH (Great Britain)	: all the ingredients of this product in the scope of UK-REACH, if not exempted, have been notified.
Swiss ChemO (SR 813.11)	: This preparation is not subject to the obligation to register pursuant to art.69 of the Chemicals Ordinance (ChemO)

Germany

Water hazard class (WGK)	: WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1).
Hazardous Incident Ordinance (12. BImSchV)	: Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

ABM category	: A(4) - low hazard for aquatic organisms, may have longterm hazardous effects in aquatic environment
SZW-lijst van kankerverwekkende stoffen	: None of the components are listed
SZW-lijst van mutagene stoffen	: None of the components are listed
SZW-lijst van reprotoxische stoffen – Borstvoeding	: None of the components are listed
SZW-lijst van reprotoxische stoffen –	: None of the components are listed
Vruchtbaarheid	
SZW-lijst van reprotoxische stoffen – Ontwikkeling	: None of the components are listed

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

Glycerides, C16-18 mono- and di-

SECTION 16: Other information

Training advice	: No supplementary information available.
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Chem. inventories legend

- : AIIC = Australian Inventory of Industrial Chemicals
 - DSL = Canadian Domestic Substances 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
 - 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
 - TSCA (Active) = USA Toxic Substances Control Act
 - VNCI = Vietnam National Chemicals Inventory
- SDS changed sections : 16 - Other information
- SDS Reason for revision : template
- 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.