

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

1.1. Product identifier

| | |
|-------------------------------|--|
| Product form | : Mixtures |
| Generic name | : RADIAGREEN OSD |
| REACH number | : all the ingredients of this product in the scope of Regulation 1907/2006/EC (REACH), if not exempted, have been (pre-)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. |

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 |
| Industrial category | : IC2 - Chemical industry: basic chemicals, IC3 - Chemical industry: chemicals used in synthesis |

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
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 EMERGENCYNUMBER (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/ | |
| Greece | Poisons Information Centre Children's Hospital "Aglaiia, Kyriakou" | 11527 Athens | +30 10 779 3777 | |
| Greece | Department of Forensic Medicine & Toxicology Aristotle University of Thessaloniki, Medical Faculty | 54006 Thessaloniki | | |
| Iceland | Eitrunarmiðstöð Landspítali | Fossvogi 108 Reykjavik | +354 543 22 22 | |
| Ireland | National Poisons Information Centre Beaumont Hospital | PO Box 1297 Beaumont Road 9 Dublin | +353 1 809 2566 ' +353 1 809 2166 (public, 8am - 10pm, 7/7) | |
| Israel | Israel Poison Information Center Rambam Health Care Campus | 6 Ha'Aliya Street 31096 Haifa | +972 4 854 1900 | |
| Malta | Medicines & Poisons Info Office | Mater Dei Hospital MSD Msida | +356 2545 6504 | |
| United Kingdom | National Poisons Information Service (Belfast Centre) Royal Victoria Hospital | Grosvenor Road BT12 6BA Belfast | 0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours) | |

| Country | Official advisory body | Address | Emergency number | Comment |
|----------------|--|---|---|---------|
| United Kingdom | National Poisons Information Service (Birmingham Centre) City Hospital, Guy's & St Thomas' Hospital Trust | Dudley Road B18 7QH Birmingham | 0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours) | |
| United Kingdom | National Poisons Information Service (Cardiff Centre) Gwenwyn Ward, Wolfson Unit | Penarth CF64 2XX Cardiff | 0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours) | |
| United Kingdom | NPIS Edinburgh (Scottish Poisons Information Bureau) Royal Infirmary of Edinburgh, Centre Hospitalier Universitaire Bab el Oued | 51 Little France Crescent EH16 4SA Edinburgh | 0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours) | |
| United Kingdom | Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Centre Hospitalier Universitaire de Constantine | Avonley Road SE14 5ER London | 0870 243 2241 | |
| United Kingdom | National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre | Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle | 0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours) | |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, Category 2 H315 Calculation method
Serious eye damage/eye irritation, Category 1 H318 Calculation method

Full text of hazard classes and H-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]

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) :

Danger

Hazardous ingredients :

Anionic surfactant; Ethoxylates

Hazard statements (CLP) :

H315 - Causes skin irritation
H318 - Causes serious eye damage

Precautionary statements (CLP) :

P264 - Wash hands thoroughly after handling
P280 - Wear eye protection, protective clothing, protective gloves
P302+P352 - IF ON SKIN: Wash with plenty of water
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor
P321 - Specific treatment (see emergency phone number on this label)

2.3. Other hazards

No additional information available

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] |
|--------------------------------|--------------------|----------|---|
| Anionic surfactant (Component) | | 0,5 - 20 | Skin Irrit. 2, H315 Eye Dam. 1, H318 |
| Ethoxylates (Component) | | 0,5 - 5 | Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 |

Full text of H-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 the victim into fresh air. Respiratory problems: consult a doctor/medical service. |
| First-aid measures after skin contact | : Rinse with water. Soap may be used. Take victim to a doctor if irritation persists. |
| First-aid measures after eye contact | : Rinse with water. Take victim to an ophthalmologist if irritation persists. |
| First-aid measures after ingestion | : Rinse mouth with water. Call Poison Information Centre (www.who.int/ipcs/poisons/centre/directory/en). Consult a doctor/medical service if you feel unwell. |

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

Symptoms/injuries : Unlikely to cause harmful effects.

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. Adapt extinguishing media to the environment. |
| Unsuitable extinguishing media | : Solid waterjet 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 heat: have neighbourhood close doors and windows. Exposure to fire/heat: consider evacuation. Wash contaminated clothes.

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

Methods for cleaning up : Clean contaminated surfaces with an excess of water and soap solution. Take up liquid spill into inert absorbent material, e.g.: dry sand/earth/vermiculite or 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

Prohibitions on mixed storage : KEEP SUBSTANCE AWAYFROM: heat sources.

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 : SPECIAL REQUIREMENTS: closing. correctly 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

No additional information available

8.2. Exposure controls

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

Materials for protective clothing : GIVE GOOD RESISTANCE: nitrile rubber



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance (room temperature) : Liquid.

Colour : Yellow to amber.

Odour : Characteristic odour. Sweet odour.

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : No data available

Melting point : < -15 °C

Freezing point : No data available

Boiling point : No data available

Flash point : > 110 °C (ASTM D92)

Auto-ignition temperature : > 150 °C

Decomposition temperature : $>$ Flash point

Flammability (solid, gas) : No data available

| | |
|----------------------------------|---|
| Vapour pressure | : No supplementary information available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : No data available |
| Density | : ca. 994,2 kg/m ³ (20°C) ca. 978,2 kg/m ³ (40°C) ca. 930,2 kg/m ³ (100°C) |
| Solubility | : No data available |
| Log Pow | : > 5 |
| Viscosity, kinematic | : ca. 31 mm ² /s (40°C) |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits | : No data available |

9.2. Other information

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 toxicological effects

| | |
|-----------------------------------|------------------------------|
| Acute toxicity | : Not classified |
| Skin corrosion/irritation | : Causes skin irritation. |
| Serious eye damage/irritation | : Causes serious eye damage. |
| 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 |

RADIAGREEN OSD

| | |
|----------------------|----------------------------------|
| Viscosity, kinematic | ca. 31 mm ² /s (40°C) |
|----------------------|----------------------------------|

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : According to literature: no environmental hazard.
Ecology - air : No supplementary information available.
Ecology - water : No bioaccumulation data available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

| RADIAGREEN OSD | |
|----------------|-----|
| Log Pow | > 5 |

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. 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 / RID / IMDG / IATA / ADN

| ADR | IMDG | IATA | ADN | RID |
|---|---|------------------------------------|------------------------------------|------------------------------------|
| 14.1. UN 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 | 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 | | | | |
| Dangerous for the environment : No | Dangerous for the environment : No Marine pollutant : No | Dangerous for the environment : No | Dangerous for the environment : No | Dangerous for the environment : No |
| Marine pollutant: no | | | | |

14.6. Special precautions for user

- Overland transport

Transport regulations (ADR) : Not subject

- Transport by sea

Transport regulations (IMDG) : Not subject

- Air transport

Transport regulations (IATA) : Not subject

- Inland waterway transport

No data available

- Rail transport

Transport regulations (RID) : Not subject

14.7. 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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

Chemical inventories : Listed on AICS, DSL, ECST, IECSC, KECL, NZIoC, PICCS, TSCA, EC inventories

Germany

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Training advice : No supplementary information available.

SDS changed sections : 5 - Firefighting measures; 16 - Other information

SDS Reason for revision : No supplementary information available

Chem. inventories legend

: AICS = Australian Inventory of Chemical Substances
DSL = Canadian Domestic Substances List
ECST = Existing Chemical Substances Inventory of Taiwan
IECSC = Inventory of Existing Chemical Substances in China
KECL = Korean Existing Chemical List
NZIoC = New Zealand Inventory of Chemicals
PICCS = Philippine Inventory of Chemicals and Chemical Substances
TSCA = USA Toxic Substances Control Act
EC inventories = European Community inventories of chemicals (EINECS/ELINCS/NLP/REACH)

Other information

: No supplementary information available.

Full text of H- and EUH-statements:

| | |
|---------------------|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| H302 | Harmful if swallowed |
| H315 | Causes skin irritation |
| H318 | Causes serious eye damage |

SDS 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

DASIC[®]

INTERNATIONAL

SAFETY DATA SHEET

Slickgone NS

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

1.1. Product identifier

Product name Slickgone NS

Product number F315

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

Identified uses Internationally approved dispersant for treating oil spills in the marine environment.

1.3. Details of the supplier of the safety data sheet

Supplier Dasic International OSD Ltd
 Winchester Hill, Romsey, Hampshire, SO51 7YD, UK
 +44 1794 512419
 +44 1794 522346
 info@dasicinter.com

1.4. Emergency telephone number

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Asp. Tox. 1 - H304

Environmental hazards Not Classified

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements H304 May be fatal if swallowed and enters airways.

Precautionary statements P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P260 Do not breathe spray.
 P313 Get medical advice/ attention.

Contains Distillates (petroleum), hydrotreated light

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Slickgone NS

| | |
|--|--|
| Distillates (petroleum), hydrotreated light | 60-100% |
| CAS number: 64742-47-8 | EC number: 265-149-8 |
| | REACH registration number: 01-2119484819-18-0001 |
| Classification | |
| Asp. Tox. 1 - H304 | |
| Sodium dioctyl sulphosuccinate | 5-10% |
| CAS number: 577-11-7 | EC number: 209-406-4 |
| | REACH registration number: 01-2119491296-29-0000 |
| Classification | |
| Acute Tox. 4 - H302 | |
| Acute Tox. 4 - H312 | |
| Skin Irrit. 2 - H315 | |
| Eye Irrit. 2 - H319 | |

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------|---|
| Inhalation | Considered to be a low inhalation hazard at normal workplace temperatures. Get medical attention if symptoms are severe or persist. |
| Ingestion | Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis. Get medical attention if a large quantity has been ingested. If in doubt, get medical attention promptly. Never give anything by mouth to an unconscious person. |
| Skin contact | Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if symptoms are severe or persist. |
| Eye contact | Remove any contact lenses and open eyelids wide apart. Rinse with water. Continue to rinse for at least 15 minutes and get medical attention. |

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

| | |
|---------------------|--|
| Inhalation | No specific symptoms known. |
| Ingestion | Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis. |
| Skin contact | May cause irritation. |
| Eye contact | May cause severe eye irritation. |

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|---------------------------------------|--|
| Suitable extinguishing media | Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. |
| 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

Slickgone NS

Hazardous combustion products Acrid smoke or fumes.

5.3. Advice for firefighters

Protective actions during firefighting Cool containers exposed to flames with water until well after the fire is out.

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 Wear protective clothing as described in Section 8 of this safety data sheet. No smoking, sparks, flames or other sources of ignition near spillage.

6.2. Environmental precautions

Environmental precautions Avoid the spillage or runoff entering drains, sewers or watercourses. Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb spillage with sand or other inert absorbent. Collect spillage for reclamation or disposal in sealed containers via a licensed waste contractor. Flush contaminated area with plenty of water.

6.4. Reference to other sections

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Wear protective clothing as described in Section 8 of this safety data sheet. Eliminate all sources of ignition. Do not spray on an open flame or other ignition source.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep out of the reach of children. Keep only in the original container in a cool, well-ventilated place. Store away from the following materials: Strong oxidising agents. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect from sunlight.

7.3. Specific end use(s)

Specific end use(s) Obtain special instructions before use.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Distillates (petroleum), hydrotreated light

CEFIC-HSPA : 1200 mg/m³

Distillates (petroleum), hydrotreated light (CAS: 64742-47-8)

DNEL

Consumer - Oral; Long term systemic effects: 19 mg/kg/day
Workers - Inhalation; Long term systemic effects: 330 mg/m³

Sodium dioctyl sulphosuccinate (CAS: 577-11-7)

Slickgone NS

DNEL

Professional - Inhalation; Long term systemic effects: 13 mg/m³
 Professional - Dermal; Long term systemic effects: 18.8 mg/kg/day
 Professional - Oral; Long term systemic effects: 18.8 mg/kg/day

8.2. Exposure controls

| | |
|---|---|
| Appropriate engineering controls | Provide adequate ventilation. |
| Eye/face protection | Wear chemical splash goggles. |
| Hand protection | Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. |
| Other skin and body protection | Wear suitable protective clothing as protection against splashing or contamination. |
| Respiratory protection | Respiratory protection may be required if excessive airborne contamination occurs. Wear a respirator fitted with the following cartridge: Organic vapour + dust and mist filter. |

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

| | |
|---|--|
| Appearance | Viscous liquid. |
| Colour | Brown. |
| Odour | Slight. Petroleum. |
| Odour threshold | No information available. |
| pH | pH (concentrated solution): 5 - 7 |
| Melting point | < -10°C |
| Initial boiling point and range | 192°C @ 760 mm Hg |
| Flash point | 72°C Pinsky-Martens closed cup. |
| Evaporation rate | No information available. |
| Upper/lower flammability or explosive limits | No information available. |
| Vapour pressure | No information available. |
| Vapour density | > 1 (air = 1) |
| Relative density | 0.88 @ 20°C |
| Solubility(ies) | Forms an emulsion with water. |
| Partition coefficient | Not applicable. |
| Auto-ignition temperature | 225°C |
| Decomposition Temperature | No information available. |
| Viscosity | Kinematic viscosity ≤ 20.5 mm ² /s. |

9.2. Other information

| | |
|--------------------------|---|
| Other information | Conductivity 5.4 x 10 ¹⁷ pS/m (Concentrate product). |
|--------------------------|---|

SECTION 10: Stability and reactivity

Slickgone NS

10.1. Reactivity

10.2. Chemical stability

Stability No particular stability concerns.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions The following materials may react strongly with the product: Oxidising agents.

10.4. Conditions to avoid

Conditions to avoid Avoid the following conditions: Heat, sparks, flames. Thermal decomposition or combustion products may include the following substances: Acrid smoke or fumes.

10.5. Incompatible materials

Materials to avoid Oxidising agents.

10.6. Hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 21,978.02

Acute toxicity - dermal

ATE dermal (mg/kg) 21,978.02

Aspiration hazard

Aspiration hazard Aspiration hazard if swallowed.

Ingestion

Aspiration hazard if swallowed. Nausea, vomiting.

Skin contact

Prolonged contact may cause dryness of the skin.

Eye contact

May cause severe eye irritation.

SECTION 12: Ecological Information

12.1. Toxicity

Ecological information on ingredients.

Distillates (petroleum), hydrotreated light

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 2.4 mg/l, Oncorhynchus mykiss (Rainbow trout)

Sodium dioctyl sulphosuccinate

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 20 - 40 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 36 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability Expected to be readily biodegradable.

Phototransformation Data lacking.

Slickgone NS

Stability (hydrolysis) Data lacking.

Biodegradation Data lacking.

Biological oxygen demand Data lacking.

Chemical oxygen demand Data lacking.

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Partition coefficient Not applicable.

12.4. Mobility in soil

Mobility Semi-mobile.

Adsorption/desorption coefficient Not applicable.

Henry's law constant Not applicable.

Surface tension Data lacking.

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 None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

Disposal methods Dispose of waste product or used containers in accordance with local regulations External recovery, treatment, recycling and disposal of waste should comply with all applicable local and/or national regulations.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

UN No. (ADR/RID) Not regulated.

UN No. (IMDG) Not regulated.

UN No. (ICAO) Not regulated.

UN No. (ADN) 9003

14.2. UN proper shipping name

Not applicable.

Proper shipping name (ADR/RID) Not regulated.

Slickgone NS

Proper shipping name (IMDG) Not regulated.

Proper shipping name (ICAO) Not regulated.

Proper shipping name (ADN) Substances with a flash point above 60°C and not more than 100°C

14.3. Transport hazard class(es)

ADN class 9

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

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

Transport in bulk according to Not applicable.

**Annex II of MARPOL 73/78
and the IBC Code**

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).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision date 15/10/2018

Revision 15

Supersedes date 11/01/2018

SDS number 4607

Hazard statements in full H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

DASIC SLICKGONE NS - Type 3 and type 2 dispersant



| | |
|-------------------------------------|--|
| COMPOSITION | Aliphatic hydrocarbon solvent, ethoxylated natural fatty acid, sorbitan ester, sodium dioctyl sulphosuccinate and natural fatty acid |
| VISCOSITY | 30 to 60 mPa.s at 0°C (Brookfield LV) |
| FLASH POINT | 72°C (Pensky Martens Closed Cup) |
| CLOUD POINT | Below -10°C |
| POUR POINT | Below -18°C (ASTM D97) |
| PH | Neutral |
| TOXICITY | Under the CLP system, classed as Asp. Tox. 1 - H304 |
| ECOTOXICITY | Meets the requirements of the UK, French, Norwegian, Australian and other dispersant test protocols. |
| BIODEGRADABILITY | Meets the French requirements for dispersant biodegradability (NFT.90-346) |
| OTHER ECOLOGICAL INFORMATION | Slightly toxic to practically non-toxic (IMO/GESAMP classification) |
| EFFICIENCY | Typically 80% – 90% under UK Government LR448(OP) protocol |
| EU REGULATIONS | Meets the requirements of REACH. - No SVHCs. Classified according to CLP |

PACKING AND TRANSPORT INFORMATION

| | |
|------------------------------|---|
| PACKING FORM | 1000 litre IBCs with EVOH liner. Headspace nitrogen purged |
| TRANSPORT INFORMATION | Not classified as dangerous goods under international road, rail, air and sea regulations |

STORAGE LOCATION AND AVAILABLE QUANTITIES

| | |
|-----------------------|------------|
| OLDMELDRUM (SCOTLAND) | 200 TONNES |
| RAVENNA (ITALY) | 200 TONNES |

APPROVAL FOR USE

Approved in Belgium, Croatia, Cyprus, France, Ireland, Malta, Norway, Portugal and the UK.

Slickgone NS can also be used in Denmark, Germany and The Netherlands on the basis that the product is approved by two Bonn Agreement Countries.

DIRECTIONS FOR USE

From aircraft, Slickgone NS should be applied undiluted by suitable spray booms to give a mean droplet diameter about 700 microns. From boats, best applied undiluted through suitable application equipment. Regardless of method, a dose rate of 30 – 50 litres per hectare of spilled oil should be used, equivalent to approximately 1 part Slickgone NS to 25 parts oil, assuming an average oil thickness of 0.1 mm.

EMERGENCY CONTACT DETAILS

Emergency telephone number (24/7): +44 1794 512419

Supplier information: DASIC International Ltd, Winchester Hill, Romsey, Hampshire, SO51 7YD, UK



RADIAGREEN OSD - Type 3 dispersant



| | |
|-------------------------------------|--|
| COMPOSITION | Anionic surfactant, ethoxylates; 100% free of any aromatic hydrocarbon-based solvents; emulsifying agents compliant with AFNOR 90 348 test protocol |
| VISCOSITY | Ca. 31 mm ² /s (40°C) or 25.5 Centistokes (ASTM D 445, at 40°C) |
| FLASH POINT | >110°C (ASTM D 92) |
| CLOUD POINT | -16°C (ASTM D 2500) |
| POUR POINT | -21°C (ASTM D 97) |
| PH | 6.33 (ASTM D 1172) |
| TOXICITY | No acute toxicity (Category 4); may cause skin irritation (Category 2) and serious eye damage (Category 1); Hazard phrases: H302, H315, H318; Risk phrases: R22, R38, R41 |
| ECOTOXICITY | Toxicity on white shrimp (<i>Palaemonetes varians</i>) less than 10 times the reference toxicity of Noramium (AFNOR 90 349) |
| BIODEGRADABILITY | >50% after 28 days (AFNOR 90 346) |
| OTHER ECOLOGICAL INFORMATION | According to literature: no environmental hazard; compliant with and passed the ecotoxicity and biodegradability 'Sea Test' and 'Rock Shore Test' protocols in UK; bioaccumulation potential (i.e. Log Pow) >5 |
| EFFICIENCY | Compliant with requirements of the AFNOR NFT 90-345 (France) and WSL LR 448 (UK) test protocols, both in concentrated and in diluted form (dil. to 10 %). Its efficiency is not affected by the viscosity of the crude oil (ranging between 500 to 2000 mPa.s at 10°C) |
| EU REGULATIONS | No REACH Annex XVII restrictions; contains no REACH candidate substance |

PACKING AND TRANSPORT INFORMATION

| | |
|------------------------------|---|
| PACKING FORM | Packed in Intermediate Bulk Container (IBC Schutz Ecobulk LX 1000) containing 950kg |
| TRANSPORT INFORMATION | Not subject to any transport regulations by air (IATA), sea (IMDG) or land (ADR, RID) |

STORAGE LOCATION AND AVAILABLE QUANTITIES

| | |
|--------------------|--------------|
| LIMASSOL (CYPRUS) | 201.4 TONNES |
| GUDJA (MALTA) | 183.6 TONNES |
| SINES (PORTUGAL) | 201.4 TONNES |
| LAS PALMAS (SPAIN) | 201.4 TONNES |
| RAVENNA (ITALY) | 201.4 TONNES |

APPROVAL FOR USE

The dispersant is approved for use in the following European states: Belgium, Croatia, Cyprus, France, Ireland, Malta, Netherlands, Portugal, Spain and United Kingdom.

DIRECTIONS FOR USE

Radiagreen OSD can be used pure, undiluted, in a 1 on 20 proportions (1 part dispersant for 20 parts of oil) for dispersion by means of aircraft or vessel.

Appropriate spraying equipment is advisable such that the product is uniformly distributed on the surface of the spill. An additional mechanical mixing may be advisable to enhance the breaking.

Always make sure the dispersant is sprayed on top of the spill. Give the dispersant some time (30-40 minutes) to penetrate the oil. Then spread the treated spill using a mechanical device or a water jet (this might not be necessary in open sea).

EMERGENCY CONTACT DETAILS

Emergency telephone number (24/7): +32 3 575 55 55 (SGS ERS; Oleon Contract No 76858)

Supplier information: OLEON N.V.
Assenedestraat 2
9940 Ertvelde - Belgium
Telephone: +32 9 341 10 11
Fax: +32 9 341 10 00
Email: sds@oleon.com

