

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

#### 1.1. Product identifier

|                               |                                               |
|-------------------------------|-----------------------------------------------|
| Product form                  | : Substance                                   |
| Trade name                    | : RADIA 7732                                  |
| IUPAC name                    | : Isopropyl palmitate                         |
| EC no.                        | : 205-571-1                                   |
| CAS No.                       | : 142-91-6                                    |
| REACH registration No.        | : 01-2119541808-31                            |
| C&L notification reference no | : not applicable (REACH registered substance) |

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

##### Relevant identified uses

|                   |                  |
|-------------------|------------------|
| Main use category | : Industrial use |
|-------------------|------------------|

| Title                                                            | Life cycle stage | Use descriptors                                                                                                                                                                                                                                                                                                                                   |
|------------------------------------------------------------------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General overview of industrial uses of monoalkyl fatty esters    | Industrial       | SU3, PC1, PC8, PC12, PC14, PC18, PC19, PC20, PC21, PC24, PC32, PC34, PC35, PROC2, PROC3, PROC4, PROC5, PROC6, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC12, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, ERC4, ERC5, ERC6a, ERC6b, ERC6c, ERC6d, ERC7, ERC8a, ERC8b, ERC8c, ERC8d, ERC8f, ERC9a, ERC9b, ERC10a, ERC11a, ERC12a, ERC12b |
| General overview of professional uses of monoalkyl fatty esters  | Professional     | SU22, PC12, PC20, PC21, PC23, PC27, PC31, PC32, PC35, PC39, PROC2, PROC3, PROC4, PROC5, PROC6, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC20, PROC21, ERC4, ERC5, ERC6a, ERC6b, ERC6c, ERC7, ERC8a, ERC8b, ERC8c, ERC8d, ERC8e, ERC8f, ERC9a, ERC9b, ERC10a, ERC11a                |
| General overview of consumer uses of monoalkyl fatty esters      | Consumer         | SU21, PC1, PC3, PC4, PC8, PC9a, PC9b, PC9c, PC12, PC13, PC15, PC16, PC17, PC18, PC20, PC23, PC24, PC25, PC27, PC28, PC31, PC32, PC34, PC35, PC37, PC39, ERC2, ERC3, ERC4, ERC5, ERC6a, ERC6b, ERC6c, ERC6d, ERC7, ERC8a, ERC8b, ERC8c, ERC8d, ERC8e, ERC8f, ERC9a, ERC9b, ERC10a, ERC11a                                                          |
| General overview of manufacturing uses of monoalkyl fatty esters |                  | SU3, PROC2, PROC3, PROC4, PROC5, PROC6, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC14, PROC15, PROC21, ERC1                                                                                                                                                                                                                        |
| General overview of formulation uses of monoalkyl fatty esters   |                  | SU3, PC0, PC2, PC9a, PC12, PC18, PC20, PC23, PC24, PC32, PC34, PC39, PROC2, PROC3, PROC4, PROC5, PROC6, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC12, PROC13, PROC14, PROC15, PROC21, ERC2, ERC3                                                                                                                                          |

Full text of use descriptors: see section 16

### 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](mailto:sds@oleon.com), [www.oleon.com](http://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)

## 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.

The product does not meet the PBT and vPvB classification criteria

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] |
|---------------------|----------------------------------------------------------------------|-------|-----------------------------------------------------------------|
| Isopropyl palmitate | CAS No.: 142-91-6<br>EC no.: 205-571-1<br>REACH-no: 01-2119541808-31 | ≤ 100 | 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 ophthalmologist 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 ( <a href="http://www.who.int/ipcs/poisons/centre/directory/en">www.who.int/ipcs/poisons/centre/directory/en</a> ). |

### 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 | : 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 supplementary information available.                                                                                                                   |
| 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.<br>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 :  $\geq 10$  °C above melting point

### 7.2. Conditions for safe storage, including any incompatibilities

- Storage temperature :  $< 60$  °C (requires special attention while using IBC packaging)
- Heat and ignition sources : KEEP AWAY FROM: Ignition sources.
- 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 : 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

No additional information available

### 8.2. Exposure controls

#### Personal protection equipment

##### Personal protective equipment:

Gloves. Protective clothing. Safety glasses.

##### Personal protective equipment symbol(s):



#### Eye and face protection

##### Eye protection:

Wear eye protection

#### Skin protection

##### Skin and body protection:

Wear suitable protective clothing

**Hand protection:**

Wear protective gloves

**Other skin protection**

**Materials for protective clothing:**

Good resistance: Nitrile rubber

**Respiratory protection**

**Respiratory protection:**

In case of insufficient ventilation, wear suitable respiratory equipment

## 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.                                                             |
| Odour                                           | : Characteristic. Mild odor.                                          |
| Odour threshold                                 | : Not available                                                       |
| Melting point                                   | : 13.5 °C                                                             |
| Freezing point                                  | : < 15 °C                                                             |
| Boiling point                                   | : 160 °C Atm. press.: 2 mm Hg                                         |
| HMIS Flammability                               | : Not available                                                       |
| Explosive properties                            | : Product is not explosive.                                           |
| Oxidising properties                            | : Not oxidising.                                                      |
| Lower explosion limit                           | : Not available                                                       |
| Upper explosion limit                           | : Not available                                                       |
| Flash point                                     | : 168 – 170 °C                                                        |
| Auto-ignition temperature                       | : 235 °C (EC A.15; 2012)                                              |
| Decomposition temperature                       | : Flash point                                                         |
| pH                                              | : 5 – 8                                                               |
| Viscosity, kinematic                            | : 8.197 – 9.368 mm <sup>2</sup> /s                                    |
| Viscosity, dynamic                              | : 7 – 8 mPa·s Temp.: '20°C' Parameter: 'dynamic viscosity (in mPa s)' |
| Solubility                                      | : Not available                                                       |
| Partition coefficient n-octanol/water (Log Kow) | : Not available                                                       |
| Partition coefficient n-octanol/water (Log Pow) | : 8.16                                                                |
| Vapour pressure                                 | : 0.00745 Pa Temp.: 25 °C                                             |
| Vapour pressure at 50 °C                        | : Not available                                                       |
| Density                                         | : 854 kg/m <sup>3</sup> Type: 'density' Temp.: 20 °C                  |
| Relative density                                | : Not available                                                       |
| 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 | : Soluble in oils/fats, Soluble in most organic solvents, Poorly soluble 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 7732 (142-91-6)

|                       |                                                                                                                 |
|-----------------------|-----------------------------------------------------------------------------------------------------------------|
| LD50 oral             | > 5000 mg/kg bodyweight Animal: mouse, Animal sex: female, Guideline: OECD Guideline 401 (Acute Oral Toxicity)  |
| LC50 Inhalation - Rat | > 5.3 mg/l air Animal: rat, Guideline: OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class Method) |

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  
Aspiration hazard : Not classified

#### RADIA 7732 (142-91-6)

|                      |                              |
|----------------------|------------------------------|
| Viscosity, kinematic | 8.2 – 9.4 mm <sup>2</sup> /s |
|----------------------|------------------------------|

## 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.

## 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 data available concerning bioaccumulation

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

#### RADIA 7732 (142-91-6)

|                      |                                                                                       |
|----------------------|---------------------------------------------------------------------------------------|
| LC50 - Fish [1]      | > 10000 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) |
| EC50 - Crustacea [1] | > 3000 mg/l Test organisms (species): Daphnia magna                                   |
| NOEC (chronic)       | ≥ 100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'                   |

### 12.2. Persistence and degradability

#### RADIA 7732 (142-91-6)

|                               |                                 |
|-------------------------------|---------------------------------|
| Persistence and degradability | Readily biodegradable in water. |
| Biodegradation                | > 90 % (OECD 301B; 28d)         |

### 12.3. Bioaccumulative potential

#### RADIA 7732 (142-91-6)

|                                                 |      |
|-------------------------------------------------|------|
| Partition coefficient n-octanol/water (Log Pow) | 8.16 |
|-------------------------------------------------|------|

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

#### RADIA 7732 (142-91-6)

The product does not meet the PBT and vPvB classification criteria

### 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 7732 (142-91-6)

|                   |                                        |
|-------------------|----------------------------------------|
| Other information | No supplementary 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 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                                                                                                                                                                                                                        |

## SECTION 14: Transport information

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

| ADR                                     | IMDG          | IATA          | ADN           | RID           |
|-----------------------------------------|---------------|---------------|---------------|---------------|
| <b>14.1. UN number or ID number</b>     |               |               |               |               |
| Not regulated for transport             |               |               |               |               |
| <b>14.2. UN proper shipping name</b>    |               |               |               |               |
| Not regulated                           | Not regulated | Not regulated | Not regulated | Not regulated |
| <b>14.3. Transport hazard class(es)</b> |               |               |               |               |
| Not regulated                           | Not regulated | Not regulated | Not regulated | Not regulated |
| <b>14.4. Packing group</b>              |               |               |               |               |
| Not regulated                           | Not regulated | Not regulated | Not regulated | Not regulated |
| <b>14.5. Environmental hazards</b>      |               |               |               |               |
| Not regulated                           | Not regulated | Not regulated | Not regulated | Not regulated |
| No supplementary information available  |               |               |               |               |

### 14.6. Special precautions for user

#### Overland transport

Not regulated

#### Transport by sea

Not regulated

#### Air transport

Not regulated

#### Inland waterway transport

Not regulated



**Rail transport**

Not regulated

**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, DSL, EU REACH, IECSC, INSQ, Japan ENCS, Japan ISHL, KECL, NCI, NZIoC, PICCS, TCSI, TECI_DIW, TECI_FDA, TR EAEU, TSCA |
| KKDIK number (Turkey)    | : 05-0000212151-51-0000                                                                                                                      |
| K-REACH (Korea)          | : preregistered                                                                                                                              |
| UK-REACH (Great Britain) | : DUIN submitted                                                                                                                             |
| 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 awg, Hazardous to water in general (Classification according to AwSV; ID No. 1669).  
VOC content : < 1 % (1999/13/EC; 2004/42/EC; 2010/75/EU; SR 814.018)

#### Netherlands

ABM category : A(4) - low hazard for aquatic organisms, may have longterm hazardous effects in aquatic environment  
SZW List of Carcinogenic Substances : The substance is not listed  
SZW List of Mutagenic Substances : The substance is not listed  
SZW List of Reprotoxic Substances – Breastfeeding : The substance is not listed  
SZW List of Reprotoxic Substances – Fertility : The substance is not listed  
SZW List of Reprotoxic Substances – Development : The substance is not listed

### 15.2. Chemical safety assessment

The chemical safety assessment has been carried out, an exposure scenario is not applicable (substance is not classified).

## SECTION 16: Other information

Training advice : No supplementary information available.  
Chemical inventories legend : AICIS = Australian Inventory of Industrial Chemicals  
DSL = Canadian Domestic Substances List  
EU REACH = European Union REACH Regulation 1907/2006  
IECSC = Inventory of Existing Chemicals Substances in China  
INSQ = Mexico National Inventory of Chemical Substances  
Japan ENCS = Japanese Existing Chemical Substances (ISHL)  
Japan ISHL = Japanese Existing and New Chemical Substances (CSCL)  
KECL = Korean Existing Chemical List  
NCI = Vietnam National Chemical Inventory  
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 : 9 - Physical and chemical properties; 11 - Toxicological information; 12 - Ecological information  
SDS Reason for revision : No supplementary information available  
Other information : No supplementary information available.

### Full text of use descriptors

|        |                                                              |
|--------|--------------------------------------------------------------|
| ERC1   | Manufacture of the substance                                 |
| ERC10a | Widespread use of articles with low release (outdoor)        |
| ERC11a | Widespread use of articles with low release (indoor)         |
| ERC12a | Processing of articles at industrial sites with low release  |
| ERC12b | Processing of articles at industrial sites with high release |
| ERC2   | Formulation into mixture                                     |
| ERC3   | Formulation into solid matrix                                |

**Full text of use descriptors**

|       |                                                                                                                        |
|-------|------------------------------------------------------------------------------------------------------------------------|
| ERC4  | Use of non-reactive processing aid at industrial site (no inclusion into or onto article)                              |
| ERC5  | Use at industrial site leading to inclusion into/onto article                                                          |
| ERC6a | Use of intermediate                                                                                                    |
| ERC6b | Use of reactive processing aid at industrial site (no inclusion into or onto article)                                  |
| ERC6c | Use of monomer in polymerisation processes at industrial site (inclusion or not into/onto article)                     |
| ERC6d | Use of reactive process regulators in polymerisation processes at industrial site (inclusion or not into/onto article) |
| ERC7  | Use of functional fluid at industrial site                                                                             |
| ERC8a | Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)                              |
| ERC8b | Widespread use of reactive processing aid (no inclusion into or onto article, indoor)                                  |
| ERC8c | Widespread use leading to inclusion into/onto article (indoor)                                                         |
| ERC8d | Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)                             |
| ERC8e | Widespread use of reactive processing aid (no inclusion into or onto article, outdoor)                                 |
| ERC8f | Widespread use leading to inclusion into/onto article (outdoor)                                                        |
| ERC9a | Widespread use of functional fluid (indoor)                                                                            |
| ERC9b | Widespread use of functional fluid (outdoor)                                                                           |
| PC0   | Other                                                                                                                  |
| PC1   | Adhesives, sealants                                                                                                    |
| PC12  | Fertilizers                                                                                                            |
| PC13  | Fuels                                                                                                                  |
| PC14  | Metal surface treatment products                                                                                       |
| PC15  | Non-metal-surface treatment products                                                                                   |
| PC16  | Heat Transfer Fluids                                                                                                   |
| PC17  | Hydraulic Fluids                                                                                                       |
| PC18  | Ink and Toners                                                                                                         |
| PC19  | Intermediate                                                                                                           |
| PC2   | Adsorbents                                                                                                             |
| PC20  | Metal surface treatment products                                                                                       |
| PC21  | Laboratory chemicals                                                                                                   |
| PC23  | Leather treatment products                                                                                             |
| PC24  | Lubricants, greases, release products                                                                                  |
| PC25  | Metal working fluids                                                                                                   |
| PC27  | Plant protection products                                                                                              |
| PC28  | Perfumes, fragrances                                                                                                   |
| PC3   | Air care products                                                                                                      |
| PC31  | Polishes and wax blends                                                                                                |

**Full text of use descriptors**

|        |                                                                                                                                                                      |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PC32   | Polymer preparations and compounds                                                                                                                                   |
| PC34   | Textile dyes, and impregnating products                                                                                                                              |
| PC35   | Washing and cleaning products                                                                                                                                        |
| PC37   | Water treatment chemicals                                                                                                                                            |
| PC39   | Cosmetics, personal care products                                                                                                                                    |
| PC4    | Anti-Freeze and De-icing products                                                                                                                                    |
| PC8    | Biocidal products                                                                                                                                                    |
| PC9a   | Coatings and paints, thinners, paint removers                                                                                                                        |
| PC9b   | Fillers, putties, plasters, modelling clay                                                                                                                           |
| PC9c   | Finger paints                                                                                                                                                        |
| PROC10 | Roller application or brushing                                                                                                                                       |
| PROC11 | Non industrial spraying                                                                                                                                              |
| PROC12 | Use of blowing agents in manufacture of foam                                                                                                                         |
| PROC13 | Treatment of articles by dipping and pouring                                                                                                                         |
| PROC14 | Tabletting, compression, extrusion, pelettisation, granulation                                                                                                       |
| PROC15 | Use as laboratory reagent                                                                                                                                            |
| PROC16 | Use of fuels                                                                                                                                                         |
| PROC17 | Lubrication at high energy conditions in metal working operations                                                                                                    |
| PROC18 | General greasing /lubrication at high kinetic energy conditions                                                                                                      |
| PROC19 | Manual activities involving hand contact                                                                                                                             |
| PROC2  | Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions                 |
| PROC20 | Use of functional fluids in small devices                                                                                                                            |
| PROC21 | Low energy manipulation and handling of substances bound in/on materials or articles                                                                                 |
| PROC3  | Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition |
| PROC4  | Chemical production where opportunity for exposure arises                                                                                                            |
| PROC5  | Mixing or blending in batch processes                                                                                                                                |
| PROC6  | Calendering operations                                                                                                                                               |
| PROC7  | Industrial spraying                                                                                                                                                  |
| PROC8a | Transfer of substance or mixture (charging and discharging) at non-dedicated facilities                                                                              |
| PROC8b | Transfer of substance or mixture (charging and discharging) at dedicated facilities                                                                                  |
| PROC9  | Transfer of substance or preparation into small containers (dedicated filling line, including weighing)                                                              |
| SU21   | Consumer uses: Private households (= general public = consumers)                                                                                                     |
| SU22   | Professional uses: Public domain (administration, education, entertainment, services, craftsmen)                                                                     |

**Full text of use descriptors**

|     |                                                                                    |
|-----|------------------------------------------------------------------------------------|
| SU3 | Industrial uses: Uses of substances as such or in preparations at industrial sites |
|-----|------------------------------------------------------------------------------------|

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.