



# PLUSOL-R-101-18

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : PLUSOL-R-101-18

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

##### 1.2.1. Relevant identified uses

Main use category : Industrial use

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

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#### 1.4. Emergency telephone number

No additional information available

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

Serious eye damage/eye irritation, Category 1 H318

Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412

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

##### Adverse physicochemical, human health and environmental effects

Causes serious eye damage. Harmful to aquatic life with long lasting effects.

#### 2.2. Label elements

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

Hazard pictograms (CLP)



GHS05

Signal word (CLP)

: Danger

Contains

: 4-Nonylphenol, branched, ethoxylated [1 - 2.5 moles ethoxylated]

Hazard statements (CLP)

: H318 - Causes serious eye damage.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP)

: P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing 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.

P310 - Immediately call a POISON CENTER or doctor.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

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### 2.3. Other hazards

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

| Component                                                                                     |                                                                                |
|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII  | 4-Nonylphenol, branched, ethoxylated [1 - 2.5 moles ethoxylated] (127087-87-0) |
| Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII | 4-Nonylphenol, branched, ethoxylated [1 - 2.5 moles ethoxylated] (127087-87-0) |

The mixture contains substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are 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

| Component                                                                                                                                                                                                                                                                                                                       |                                                                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is 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 | 4-Nonylphenol, branched, ethoxylated [1 - 2.5 moles ethoxylated] (127087-87-0) |

## 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]                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Polyeter Polyol                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | CAS-No.: 9082-00-2                                                       | $\geq 25 - < 50$ | Not classified                                                                                                                             |
| Reaction products of phosphoryl trichloride and 2-methyloxirane                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | CAS-No.: 1244733-77-4<br>EC-No.: 807-935-0<br>REACH-no: 01-2119486772-26 | $\geq 10 - < 25$ | STOT RE 2, H373<br>Aquatic Chronic 3, H412                                                                                                 |
| 4-Nonylphenol, branched, ethoxylated [1 - 2.5 moles ethoxylated]<br>substance listed as REACH Candidate (4-Nonylphenol, branched and linear, ethoxylated)<br>substance listed in REACH Annex XIV (4-Nonylphenol, branched and linear, ethoxylated (substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof)) | CAS-No.: 127087-87-0<br>EC-No.: 500-315-8                                | $\geq 5 - < 10$  | Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight)<br>Eye Dam. 1, H318<br>Aquatic Chronic 2, H411                                        |
| N'-[3-(dimethylamino)propyl]-N,N-dimethylpropane-1,3-diamine                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CAS-No.: 6711-48-4<br>EC-No.: 229-761-9                                  | $\geq 1 - < 3$   | Acute Tox. 4 (Oral), H302 (ATE=1250 mg/kg bodyweight)<br>Acute Tox. 3 (Dermal), H311 (ATE=500 mg/kg bodyweight)<br>Aquatic Chronic 2, H411 |

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

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### 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 person to fresh air and keep comfortable for breathing.                                                                                     |
| First-aid measures after skin contact | : Wash skin with plenty of water.                                                                                                                    |
| First-aid measures after eye contact  | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately. |
| First-aid measures after ingestion    | : Call a poison center or a doctor if you feel unwell.                                                                                               |

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

|                                     |                                                                                                                                         |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Symptoms/effects after inhalation   | : Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard. |
| Symptoms/effects after skin contact | : None under normal conditions.                                                                                                         |
| Symptoms/effects after eye contact  | : Serious damage to eyes.                                                                                                               |
| Symptoms/effects after ingestion    | : None under normal conditions.                                                                                                         |

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

|                                |                                                  |
|--------------------------------|--------------------------------------------------|
| Suitable extinguishing media   | : Water spray. Dry powder. Foam. Carbon dioxide. |
| Unsuitable extinguishing media | : Do not use a heavy water stream.               |

#### 5.2. Special hazards arising from the substance or mixture

|                                                  |                                |
|--------------------------------------------------|--------------------------------|
| Fire hazard                                      | : No fire hazard.              |
| Explosion hazard                                 | : No direct explosion hazard.  |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. |

#### 5.3. Advice for firefighters

|                                |                                                                                                                                                       |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Firefighting instructions      | : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.              |

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

|                  |                                                                                                                                            |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| General measures | : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters.<br>Absorb spillage to prevent material damage. |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------|

##### 6.1.1. For non-emergency personnel

|                      |                                                              |
|----------------------|--------------------------------------------------------------|
| Protective equipment | : Wear recommended personal protective equipment.            |
| Emergency procedures | : Ventilate spillage area. Avoid contact with skin and eyes. |

##### 6.1.2. For emergency responders

|                      |                                                                                                                                                             |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
| Emergency procedures | : Evacuate unnecessary personnel. Stop leak if safe to do so.                                                                                               |

#### 6.2. Environmental precautions

Avoid release to the environment.

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### 6.3. Methods and material for containment and cleaning up

- For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
- Methods for cleaning up : Take up liquid spill into absorbent material.
- Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.
- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

- Technical measures : Keep in a cool, well-ventilated place away from heat.
- Storage conditions : Keep cool. Protect from sunlight.
- Packaging materials : Store always product in container of same material as original container.

#### Germany

Storage class (LGK, TRGS 510)

Joint storage table

: LGK 12 - Non-combustible liquids

|          |         |          |          |           |
|----------|---------|----------|----------|-----------|
| LGK 1    | LGK 2A  | LGK 2B   | LGK 3    | LGK 4.1A  |
| LGK 4.1B | LGK 4.2 | LGK 4.3  | LGK 5.1A | LGK 5.1B  |
| LGK 5.1C | LGK 5.2 | LGK 6.1A | LGK 6.1B | LGK 6.1C  |
| LGK 6.1D | LGK 6.2 | LGK 7    | LGK 8A   | LGK 8B    |
| LGK 10   | LGK 11  | LGK 12   | LGK 13   | LGK 10-13 |

Joint storage not permitted for

Joint storage with restrictions permitted for

Joint storage permitted for

: LGK 1, LGK 6.2, LGK 7

: LGK 4.1A, LGK 4.3, LGK 5.1C

: LGK 2A, LGK 2B, LGK 3, LGK 4.1B, LGK 4.2, LGK 5.1A, LGK 5.1B, LGK 5.2, LGK 6.1A, LGK 6.1B, LGK 6.1C, LGK 6.1D, LGK 8A, LGK 8B, LGK 10, LGK 11, LGK 12, LGK 13, LGK 10-13

### 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

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### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

##### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### 8.2.2. Personal protection equipment

##### Personal protective equipment:

Wear recommended personal protective equipment.

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



##### 8.2.2.1. Eye and face protection

##### Eye protection:

Safety glasses

##### 8.2.2.2. Skin protection

##### Skin and body protection:

Wear suitable protective clothing

##### Hand protection:

Protective gloves

##### 8.2.2.3. Respiratory protection

##### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

##### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

##### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|                                                 |                   |
|-------------------------------------------------|-------------------|
| Physical state                                  | : Liquid          |
| Colour                                          | : Colourless.     |
| Odour                                           | : characteristic. |
| Odour threshold                                 | : Not available   |
| Melting point                                   | : Not applicable  |
| Freezing point                                  | : Not available   |
| Boiling point                                   | : Not available   |
| Flammability                                    | : Non flammable.  |
| Lower explosion limit                           | : Not available   |
| Upper explosion limit                           | : Not available   |
| Flash point                                     | : Not available   |
| Auto-ignition temperature                       | : Not available   |
| Decomposition temperature                       | : Not available   |
| pH                                              | : Not available   |
| Viscosity, kinematic                            | : 260.87 mm²/s    |
| Viscosity, dynamic                              | : 300 mPa·s       |
| Solubility                                      | : Not available   |
| Partition coefficient n-octanol/water (Log Kow) | : Not available   |
| Vapour pressure                                 | : Not available   |

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|                                 |                  |
|---------------------------------|------------------|
| Vapour pressure at 50°C         | : Not available  |
| Density                         | : 1.15 g/ml      |
| Relative density                | : Not available  |
| Relative vapour density at 20°C | : Not available  |
| Particle characteristics        | : Not applicable |

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

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

|                             |                                                                                     |
|-----------------------------|-------------------------------------------------------------------------------------|
| Acute toxicity (oral)       | : Not classified (Based on available data, the classification criteria are not met) |
| Acute toxicity (dermal)     | : Not classified (Based on available data, the classification criteria are not met) |
| Acute toxicity (inhalation) | : Not classified (Based on available data, the classification criteria are not met) |

| Tris(2-chloro-1-methylethyl) phosphate (13674-84-5)                            |                                                                                                                                                  |
|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| LD50 dermal rabbit                                                             | > 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)                                                    |
| 4-Nonylphenol, branched, ethoxylated [1 - 2.5 moles ethoxylated] (127087-87-0) |                                                                                                                                                  |
| LD50 oral rat                                                                  | 1602 mg/kg bodyweight Animal: rat, Guideline: other:                                                                                             |
| LD50 oral                                                                      | 657.2 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: other:, 95% CL: 265 - 1664,2                                                 |
| N'-[3-(dimethylamino)propyl]-N,N-dimethylpropane-1,3-diamine (6711-48-4)       |                                                                                                                                                  |
| LD50 oral rat                                                                  | 1250 – 1600 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: EPA OTS 798.1175 (Acute Oral Toxicity) |
| LD50 dermal rabbit                                                             | 500 – 1000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)                                                |

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Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)

| 4-Nonylphenol, branched, ethoxylated [1 - 2.5 moles ethoxylated] (127087-87-0) |                                           |
|--------------------------------------------------------------------------------|-------------------------------------------|
| pH                                                                             | 5.95 Temp.: 26 °C Concentration: 1 other: |

Serious eye damage/irritation : Causes serious eye damage.

| 4-Nonylphenol, branched, ethoxylated [1 - 2.5 moles ethoxylated] (127087-87-0) |                                           |
|--------------------------------------------------------------------------------|-------------------------------------------|
| pH                                                                             | 5.95 Temp.: 26 °C Concentration: 1 other: |

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

| Tris(2-chloro-1-methylethyl) phosphate (13674-84-5) |                                                                                                                                 |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| LOAEL (animal/female, F0/P)                         | 99 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 416 (Two-Generation Reproduction Toxicity Study) |
| NOAEL (animal/male, F0/P)                           | 85 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)   |

| N'-[3-(dimethylamino)propyl]-N,N-dimethylpropane-1,3-diamine (6711-48-4) |                                                                                                                                         |
|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| NOAEL (animal/male, F0/P)                                                | 50 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test) |

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

| N'-[3-(dimethylamino)propyl]-N,N-dimethylpropane-1,3-diamine (6711-48-4) |                                                                                                                       |
|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| LOAEL (oral, rat, 90 days)                                               | 250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents) |
| NOAEL (subchronic, oral, animal/male, 90 days)                           | 750 mg/kg bodyweight Animal: , Animal sex: male                                                                       |
| NOAEL (subchronic, oral, animal/female, 90 days)                         | 250 mg/kg bodyweight Animal: , Animal sex: female                                                                     |

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

| PLUSOL-R-101-18      |              |
|----------------------|--------------|
| Viscosity, kinematic | 260.87 mm²/s |

## 11.2. Information on other hazards

### 11.2.1. Endocrine disrupting properties

| Component                                                                      |                                                                                                                                    |
|--------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| 4-Nonylphenol, branched, ethoxylated [1 - 2.5 moles ethoxylated] (127087-87-0) | The substance is identified for having endocrine disrupting properties but there is no additional data available (see section 2.3) |

### 11.2.2. Other information

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term (acute) : Not classified (Based on available data, the classification criteria are not met)

Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

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| Tris(2-chloro-1-methylethyl) phosphate (13674-84-5) |                                                                                                                                         |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| LC50 - Fish [1]                                     | 51 mg/l Test organisms (species): Pimephales promelas                                                                                   |
| EC50 - Crustacea [1]                                | 131 mg/l Test organisms (species): Daphnia magna                                                                                        |
| EC50 72h - Algae [1]                                | 82 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum) |
| EC50 72h - Algae [2]                                | 33 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum) |
| NOEC (chronic)                                      | 32 mg/l Test organisms (species): Daphnia magna Duration: '21 d'                                                                        |
| NOEC chronic fish                                   | 5.2 mg/l Test organisms (species): other:                                                                                               |

| 4-Nonylphenol, branched, ethoxylated [1 - 2.5 moles ethoxylated] (127087-87-0) |                                                                                                          |
|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| LC50 - Fish [1]                                                                | 84.7 mg/l Test organisms (species): Lepomis macrochirus                                                  |
| EC50 - Crustacea [1]                                                           | 14 mg/l Test organisms (species): Daphnia magna                                                          |
| EC50 72h - Algae [1]                                                           | 19.48545 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) |
| EC50 96h - Algae [1]                                                           | 12 mg/l Test organisms (species): other:                                                                 |

| N'-[3-(dimethylamino)propyl]-N,N-dimethylpropane-1,3-diamine (6711-48-4) |                                                                                                                                          |
|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| LC50 - Fish [1]                                                          | 21.4 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)                                                       |
| EC50 - Crustacea [1]                                                     | 50.3 mg/l Test organisms (species): Daphnia magna                                                                                        |
| EC50 72h - Algae [1]                                                     | 7.9 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum) |
| LOEC (chronic)                                                           | 6.06 mg/l Test organisms (species): Daphnia magna Duration: '22 d'                                                                       |
| NOEC (chronic)                                                           | 3.64 mg/l Test organisms (species): Daphnia magna Duration: '22 d'                                                                       |

### 12.2. Persistence and degradability

| PLUSOL-R-101-18                                                                |                        |
|--------------------------------------------------------------------------------|------------------------|
| Persistence and degradability                                                  | Not rapidly degradable |
| Polyeter Polyol (9082-00-2)                                                    |                        |
| Persistence and degradability                                                  | Not rapidly degradable |
| Tris(2-chloro-1-methylethyl) phosphate (13674-84-5)                            |                        |
| Persistence and degradability                                                  | Not rapidly degradable |
| 4-Nonylphenol, branched, ethoxylated [1 - 2.5 moles ethoxylated] (127087-87-0) |                        |
| Persistence and degradability                                                  | Not rapidly degradable |
| N'-[3-(dimethylamino)propyl]-N,N-dimethylpropane-1,3-diamine (6711-48-4)       |                        |
| Persistence and degradability                                                  | Not rapidly degradable |

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

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### 12.5. Results of PBT and vPvB assessment

| Component                                                                                     |                                                                                |
|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII  | 4-Nonylphenol, branched, ethoxylated [1 - 2.5 moles ethoxylated] (127087-87-0) |
| Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII | 4-Nonylphenol, branched, ethoxylated [1 - 2.5 moles ethoxylated] (127087-87-0) |

### 12.6. Endocrine disrupting properties

| Component                                                                      |                                                                                                                                    |
|--------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| 4-Nonylphenol, branched, ethoxylated [1 - 2.5 moles ethoxylated] (127087-87-0) | The substance is identified for having endocrine disrupting properties but there is no additional data available (see section 2.3) |

### 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

|                                            |                                                                                                                                                                                                                                                                 |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Regional waste regulation                  | : Disposal must be done according to official regulations.                                                                                                                                                                                                      |
| Waste treatment methods                    | : Dispose of contents/container in accordance with licensed collector's sorting instructions.                                                                                                                                                                   |
| Sewage disposal recommendations            | : Disposal must be done according to official regulations.                                                                                                                                                                                                      |
| Product/Packaging disposal recommendations | : Disposal must be done according to official regulations.                                                                                                                                                                                                      |
| Additional information                     | : Do not re-use empty containers.                                                                                                                                                                                                                               |
| HP Code                                    | : HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.<br>HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment |

## SECTION 14: Transport information

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

| ADR                                     | IMDG          | IATA          | ADN           | RID           |
|-----------------------------------------|---------------|---------------|---------------|---------------|
| <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

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### 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

#### 15.1.1. EU-Regulations

##### REACH Annex XVII (Restriction List)

| EU restriction list (REACH Annex XVII) |                                                                  |                                                                                                                |
|----------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Reference code                         | Applicable on                                                    | Entry title or description                                                                                     |
| 46.a.                                  | 4-Nonylphenol, branched, ethoxylated [1 - 2.5 moles ethoxylated] | Nonylphenol ethoxylates (NPE) (C <sub>2</sub> H <sub>4</sub> O) <sub>n</sub> C <sub>15</sub> H <sub>24</sub> O |

##### REACH Annex XIV (Authorisation List)

Contains substance(s) listed on REACH Annex XIV: 4-Nonylphenol, branched and linear, ethoxylated (EC 500-315-8, CAS 127087-87-0)

##### REACH Candidate List (SVHC)

Contains substance(s) listed on the REACH Candidate List in concentrations  $\geq 0.1\%$  or SCL: 4-Nonylphenol, branched and linear, ethoxylated (EC 500-315-8, CAS 127087-87-0)

##### PIC Regulation (Prior Informed Consent)

Contains substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals): 4-Nonylphenol, branched, ethoxylated (127087-87-0)

##### 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)

##### Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

##### 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)

# PLUSOL-R-101-18

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 15.1.2. National regulations

#### Germany

|                                            |                                                                                                                                                                                       |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Employment restrictions                    | : Observe restrictions according Act on the Protection of Working Mothers (MuSchG).<br>Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG). |
| Water hazard class (WGK)                   | : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1).                                                                                                       |
| Hazardous Incident Ordinance (12. BImSchV) | : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)                                                                                                                    |

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

| Abbreviations and acronyms: |                                                                                                 |
|-----------------------------|-------------------------------------------------------------------------------------------------|
| ADN                         | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR                         | European Agreement concerning the International Carriage of Dangerous Goods by Road             |
| ATE                         | Acute Toxicity Estimate                                                                         |
| BCF                         | Bioconcentration factor                                                                         |
| BLV                         | Biological limit value                                                                          |
| BOD                         | Biochemical oxygen demand (BOD)                                                                 |
| COD                         | Chemical oxygen demand (COD)                                                                    |
| DMEL                        | Derived Minimal Effect level                                                                    |
| DNEL                        | Derived-No Effect Level                                                                         |
| EC-No.                      | European Community number                                                                       |
| EC50                        | Median effective concentration                                                                  |
| EN                          | European Standard                                                                               |
| IARC                        | International Agency for Research on Cancer                                                     |
| IATA                        | International Air Transport Association                                                         |
| IMDG                        | International Maritime Dangerous Goods                                                          |
| LC50                        | Median lethal concentration                                                                     |
| LD50                        | Median lethal dose                                                                              |
| LOAEL                       | Lowest Observed Adverse Effect Level                                                            |
| NOAEC                       | No-Observed Adverse Effect Concentration                                                        |
| NOAEL                       | No-Observed Adverse Effect Level                                                                |
| NOEC                        | No-Observed Effect Concentration                                                                |
| OECD                        | Organisation for Economic Co-operation and Development                                          |
| OEL                         | Occupational Exposure Limit                                                                     |
| PBT                         | Persistent Bioaccumulative Toxic                                                                |
| PNEC                        | Predicted No-Effect Concentration                                                               |
| RID                         | Regulations concerning the International Carriage of Dangerous Goods by Rail                    |
| SDS                         | Safety Data Sheet                                                                               |
| STP                         | Sewage treatment plant                                                                          |
| ThOD                        | Theoretical oxygen demand (ThOD)                                                                |

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according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Abbreviations and acronyms: |                                          |
|-----------------------------|------------------------------------------|
| TLM                         | Median Tolerance Limit                   |
| VOC                         | Volatile Organic Compounds               |
| CAS-No.                     | Chemical Abstract Service number         |
| N.O.S.                      | Not Otherwise Specified                  |
| vPvB                        | Very Persistent and Very Bioaccumulative |
| ED                          | Endocrine disrupting properties          |

| Full text of H- and EUH-statements: |                                                                   |
|-------------------------------------|-------------------------------------------------------------------|
| Acute Tox. 3 (Dermal)               | Acute toxicity (dermal), Category 3                               |
| Acute Tox. 4 (Oral)                 | Acute toxicity (oral), Category 4                                 |
| Aquatic Chronic 2                   | Hazardous to the aquatic environment – Chronic Hazard, Category 2 |
| Aquatic Chronic 3                   | Hazardous to the aquatic environment – Chronic Hazard, Category 3 |
| Eye Dam. 1                          | Serious eye damage/eye irritation, Category 1                     |
| H302                                | Harmful if swallowed.                                             |
| H311                                | Toxic in contact with skin.                                       |
| H318                                | Causes serious eye damage.                                        |
| H411                                | Toxic to aquatic life with long lasting effects.                  |
| H412                                | Harmful to aquatic life with long lasting effects.                |

The classification complies with : ATP 12

SDS EU (PLUSKIM)

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