

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL Marine MS 4011**

Revision date: 23.06.2026

Product code: 723004

Page 1 of 13

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

ADDINOL Marine MS 4011

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

Motor oil.

**1.3. Details of the supplier of the safety data sheet****Manufacturer**

|                         |                                |                               |
|-------------------------|--------------------------------|-------------------------------|
| Company name:           | ADDINOL Lube Oil GmbH          |                               |
|                         | 4609                           |                               |
| Street:                 | Am Haupttor                    |                               |
| Place:                  | D-06237 Leuna                  |                               |
| Telephone:              | +49 (0) 3461 845-0             | Telefax: +49 (0) 3461 845-555 |
| E-mail:                 | info@addinol.de                |                               |
| Contact person:         | Application Technology         |                               |
| Internet:               | www.addinol.de                 |                               |
| Responsible Department: | ADDINOL Application Technology |                               |

**Supplier**

|                 |                                |                            |
|-----------------|--------------------------------|----------------------------|
| Company name:   | GEM OILS LIMITED               |                            |
| Place:          | IRL-H12K298 Regaskin Co. Cavan |                            |
| Telephone:      | +353 49 4378116                | Telefax: +353 49 4368329   |
| E-mail:         | sales@gemoils.ie               |                            |
| Contact person: | GEM OILS LIMITED               | Telephone: +353 49 4378116 |
| E-mail:         | sales@gemoils.ie               |                            |
| Internet:       | https://gemoils.ie/            |                            |

**1.4. Emergency telephone number:**

Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**

Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

**2.2. Label elements****Regulation (EC) No 1272/2008****Hazard statements**

H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements**

P273 Avoid release to the environment.

P501 Dispose of contents/container to an appropriate recycling or disposal facility.

**Special labelling of certain mixtures**

EUH208 Contains Benzenesulfonic acid, mono-C16-24-alkyl derivatives, calcium salts. May produce an allergic reaction.

**Additional advice on labelling**

Product is classified and labelled in accordance with EC regulations or the corresponding national laws.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL Marine MS 4011**

Revision date: 23.06.2026

Product code: 723004

Page 2 of 13

**2.3. Other hazards**

Prolonged/repetitive skin contact may cause skin defatting or dermatitis.  
 Spilled product must not leak into the ground.  
 Do not allow uncontrolled leakage of product into the environment.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****Relevant ingredients**

| CAS No      | Chemical name                                                                                      |              |                  | Quantity      |
|-------------|----------------------------------------------------------------------------------------------------|--------------|------------------|---------------|
|             | EC No                                                                                              | Index No     | REACH No         |               |
|             | Classification (Regulation (EC) No 1272/2008)                                                      |              |                  |               |
| 64742-54-7  | Distillates (petroleum), hydrotreated heavy paraffinic                                             |              |                  | 60 - < 80 %   |
|             | 265-157-1                                                                                          |              | 01-2119484627-25 |               |
| 70024-69-0  | Benzenesulfonic acid, mono-C16-24-alkyl derivatives, calcium salts                                 |              |                  | 0.3 - < 0.5 % |
|             | 274-263-7                                                                                          |              | 01-2119492616-28 |               |
|             | Skin Sens. 1B; H317                                                                                |              |                  |               |
| 121158-58-5 | Phenol, dodecyl-, branched                                                                         |              |                  | < 0.1 %       |
|             | 310-154-3                                                                                          | 604-092-00-9 | 01-2119513207-49 |               |
|             | Repr. 1B, Skin Corr. 1C, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1; H360F H314 H318 H400 H410 |              |                  |               |

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

**Specific Conc. Limits, M-factors and ATE**

| CAS No      | EC No     | Chemical name                                                                                                        | Quantity      |
|-------------|-----------|----------------------------------------------------------------------------------------------------------------------|---------------|
|             |           | Specific Conc. Limits, M-factors and ATE                                                                             |               |
| 64742-54-7  | 265-157-1 | Distillates (petroleum), hydrotreated heavy paraffinic                                                               | 60 - < 80 %   |
|             |           | dermal: LD50 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg                                                               |               |
| 70024-69-0  | 274-263-7 | Benzenesulfonic acid, mono-C16-24-alkyl derivatives, calcium salts                                                   | 0.3 - < 0.5 % |
|             |           | dermal: LD50 = > 4000 mg/kg; oral: LD50 = > 16000 mg/kg                                                              |               |
| 121158-58-5 | 310-154-3 | Phenol, dodecyl-, branched                                                                                           | < 0.1 %       |
|             |           | dermal: LD50 = ca. 15000 mg/kg; oral: LD50 = 2100 mg/kg Aquatic Acute 1; H400: M=10<br>Aquatic Chronic 1; H410: M=10 |               |

**Further Information**

DMSO-Extract < 3 %; IP 346. Classification system: The classification corresponds to the current EC lists and is completed by information from specialist literature and company information.

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

Self-protection of the first aider. Change contaminated clothing. Do not put any product-impregnated cleaning rags into your trouser pockets.

**After inhalation**

Move victim to fresh air. Put victim at rest and keep warm. Seek medical attention if problems persist.

**After contact with skin**

After contact with skin, wash immediately with plenty of water and soap. Change contaminated clothing. In case of skin irritation, seek medical treatment.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL Marine MS 4011**

Revision date: 23.06.2026

Product code: 723004

Page 3 of 13

**After contact with eyes**

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

**After ingestion**

Do NOT induce vomiting.

Rinse mouth thoroughly with water. Call a physician immediately.

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

No information available.

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

First Aid, decontamination, treatment of symptoms.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Foam. Extinguishing powder. Carbon dioxide (CO<sub>2</sub>). Atomized water.

**Unsuitable extinguishing media**

High power water jet.

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

In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO<sub>2</sub>). Sulfur oxides. Phosphorus oxides. Nitrogen oxides (NO<sub>x</sub>). carbon black.

**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

**Additional information**

Co-ordinate fire-fighting measures to the fire surroundings. Use water spray jet to protect personnel and to cool endangered containers. In case of fire and/or explosion do not breathe fumes. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****General advice**

High slip hazard because of leaking or spilled product. Remove all sources of ignition. Wear breathing apparatus if exposed to vapours/dusts/aerosols.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities. Prevent spread over a wide area (e.g. by containment or oil barriers).

**6.3. Methods and material for containment and cleaning up****Other information**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Clean contaminated articles and floor according to the environmental legislation.

**6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Section 12: Ecological Information (non-mandatory)

Disposal: see section 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL Marine MS 4011**

Revision date: 23.06.2026

Product code: 723004

Page 4 of 13

**Advice on safe handling**

Work in well-ventilated zones or use proper respiratory protection. Avoid oil mist. If handled uncovered, arrangements with local exhaust ventilation have to be used. Avoid contact with skin, eyes and clothes.

**Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking.

**Advice on general occupational hygiene**

Wash hands before breaks and after work. Take off immediately all contaminated clothing. Wash contaminated clothing prior to re-use. Do not eat, drink, smoke or sneeze at the workplace.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep the packing dry and well sealed to prevent contamination and absorption of humidity. Keep container tightly closed in a cool place. Keep/Store only in original container.

**Hints on joint storage**

Keep away from food, drink and animal feedingstuffs.

Keep away from: Oxidizing agents.

**Further information on storage conditions**

Recommended storage temperature: 5 - 40°C

Protect against: heat. UV-radiation/sunlight. frost.

**7.3. Specific end use(s)**

Motor oil. Further information: see technical data sheet.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters**

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL Marine MS 4011**

Revision date: 23.06.2026

Product code: 723004

Page 5 of 13

**DNEL/DMEL values**

| CAS No                   | Substance                                                          |                |          |                    |
|--------------------------|--------------------------------------------------------------------|----------------|----------|--------------------|
| DNEL type                |                                                                    | Exposure route | Effect   | Value              |
| 64742-54-7               | Distillates (petroleum), hydrotreated heavy paraffinic             |                |          |                    |
| Worker DNEL, long-term   |                                                                    | inhalation     | systemic | 2,73 mg/m³         |
| Worker DNEL, long-term   |                                                                    | inhalation     | local    | 5,58 mg/m³         |
| Worker DNEL, long-term   |                                                                    | dermal         | systemic | 0,97 mg/kg bw/day  |
| Consumer DNEL, long-term |                                                                    | inhalation     | local    | 1,19 mg/m³         |
| Consumer DNEL, long-term |                                                                    | oral           | systemic | 0,74 mg/kg bw/day  |
| 70024-69-0               | Benzenesulfonic acid, mono-C16-24-alkyl derivatives, calcium salts |                |          |                    |
| Worker DNEL, long-term   |                                                                    | inhalation     | systemic | 11,75 mg/m³        |
| Worker DNEL, long-term   |                                                                    | dermal         | systemic | 3,33 mg/kg bw/day  |
| Worker DNEL, long-term   |                                                                    | dermal         | local    | 1,03 mg/cm²        |
| Consumer DNEL, long-term |                                                                    | inhalation     | systemic | 2,9 mg/m³          |
| Consumer DNEL, long-term |                                                                    | dermal         | systemic | 1,667 mg/kg bw/day |
| Consumer DNEL, long-term |                                                                    | dermal         | local    | 0,513 mg/cm²       |
| Consumer DNEL, long-term |                                                                    | oral           | systemic | 0,833 mg/kg bw/day |
| 121158-58-5              | Phenol, dodecyl-, branched                                         |                |          |                    |
| Worker DNEL, acute       |                                                                    | inhalation     | systemic | 44,18 mg/m³        |
| Worker DNEL, long-term   |                                                                    | dermal         | systemic | 0,25 mg/kg bw/day  |
| Worker DNEL, acute       |                                                                    | dermal         | systemic | 166 mg/kg bw/day   |
| Consumer DNEL, long-term |                                                                    | inhalation     | systemic | 0,79 mg/m³         |
| Consumer DNEL, acute     |                                                                    | inhalation     | systemic | 13,26 mg/m³        |
| Consumer DNEL, long-term |                                                                    | dermal         | systemic | 0,075 mg/kg bw/day |
| Consumer DNEL, acute     |                                                                    | dermal         | systemic | 50 mg/kg bw/day    |
| Consumer DNEL, long-term |                                                                    | oral           | systemic | 0,075 mg/kg bw/day |
| Consumer DNEL, acute     |                                                                    | oral           | systemic | 1,26 mg/kg bw/day  |

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL Marine MS 4011**

Revision date: 23.06.2026

Product code: 723004

Page 6 of 13

**PNEC values**

| CAS No                                           | Substance                                                          |                 |
|--------------------------------------------------|--------------------------------------------------------------------|-----------------|
| Environmental compartment                        |                                                                    | Value           |
| 64742-54-7                                       | Distillates (petroleum), hydrotreated heavy paraffinic             |                 |
| Secondary poisoning                              |                                                                    | 9,33 mg/kg      |
| 70024-69-0                                       | Benzenesulfonic acid, mono-C16-24-alkyl derivatives, calcium salts |                 |
| Freshwater                                       |                                                                    | 1 mg/l          |
| Freshwater (intermittent releases)               |                                                                    | 10 mg/l         |
| Marine water                                     |                                                                    | 1 mg/l          |
| Freshwater sediment                              |                                                                    | 226000000 mg/kg |
| Marine sediment                                  |                                                                    | 226000000 mg/kg |
| Secondary poisoning                              |                                                                    | 16,667 mg/kg    |
| Micro-organisms in sewage treatment plants (STP) |                                                                    | 1000 mg/l       |
| Soil                                             |                                                                    | 271000000 mg/kg |
| 121158-58-5                                      | Phenol, dodecyl-, branched                                         |                 |
| Freshwater                                       |                                                                    | 0,000074 mg/l   |
| Freshwater (intermittent releases)               |                                                                    | 0,00037 mg/l    |
| Marine water                                     |                                                                    | 0,000007 mg/l   |
| Freshwater sediment                              |                                                                    | 0,226 mg/kg     |
| Marine sediment                                  |                                                                    | 0,027 mg/kg     |
| Secondary poisoning                              |                                                                    | 4 mg/kg         |
| Micro-organisms in sewage treatment plants (STP) |                                                                    | 100 mg/l        |
| Soil                                             |                                                                    | 0,118 mg/kg     |

**Additional advice on limit values**

Recommended limit value for oil mist

TWA: 5 mg/m<sup>3</sup>STEL: 10 mg/m<sup>3</sup>

The product does not contain any relevant quantities of substances with legally established exposure limitation.

**8.2. Exposure controls****Appropriate engineering controls**

Provide adequate ventilation as well as local exhaust at critical locations.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Tightly sealed safety glasses. German Industry Norms (DIN) / European Norms (EN): DIN EN ISO 16321

**Hand protection**

Tested protective gloves are to be worn: German Industry Norms (DIN) / European Norms (EN): EN ISO 374

Duration of wearing with permanent contact: 480 min

Suitable material: NBR (Nitrile rubber).

Thickness of glove material: 0.7 mm.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL Marine MS 4011**

Revision date: 23.06.2026

Product code: 723004

Page 7 of 13

Wearing time with occasional contact (splashes): 30 min

Suitable material: NBR (Nitrile rubber).

Thickness of glove material: 0.4 mm

Protect skin by using skin protective cream.

**Skin protection**

Wear suitable protective clothing. Change contaminated clothing. Do not put any product-impregnated cleaning rags into your trouser pockets.

**Respiratory protection**

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Cosaint riospráide le scaoire i gcoinne gás orgánach agus gaile cineál A - fiuchphointe > 65 ° C: A1: <1000 ppm; A2: <5000 ppm; A3: <10,000 ppm.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

|                  |                    |
|------------------|--------------------|
| Physical state:  | liquid             |
| Colour:          | brown              |
| Odour:           | like: mineral oil. |
| Odour threshold: | not determined     |

**Test method**

|                                                           |                                     |
|-----------------------------------------------------------|-------------------------------------|
| Melting point/freezing point:                             | No data available                   |
| Boiling point or initial boiling point and boiling range: | not determined                      |
| Flammability:                                             | No data available                   |
| Lower explosion limits:                                   | No data available                   |
| Upper explosion limits:                                   | No data available                   |
| Flash point:                                              | 250 °C DIN EN ISO 2592              |
| Auto-ignition temperature:                                | not determined                      |
| Decomposition temperature:                                | No data available                   |
| pH-Value:                                                 | not applicable                      |
| Viscosity / kinematic:<br>(at 100 °C)                     | 15,5 mm <sup>2</sup> /s ASTM D 7042 |
| Water solubility:                                         | virtually insoluble                 |
| Solubility in other solvents                              | No data available                   |
| Partition coefficient n-octanol/water:                    | No data available                   |
| Vapour pressure:                                          | No data available                   |
| Density (at 15 °C):                                       | 0,885 g/cm <sup>3</sup> DIN 51757   |
| Relative vapour density:                                  | No data available                   |
| Particle characteristics:                                 | No data available                   |

**9.2. Other information****Information with regard to physical hazard classes**

Explosive properties

No data available

Self-ignition temperature

Solid:

No data available

Gas:

No data available

Oxidizing properties

No data available

**Other safety characteristics**

Evaporation rate:

No data available

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL Marine MS 4011**

Revision date: 23.06.2026

Product code: 723004

Page 8 of 13

Pour point:

-25 °C ASTM D 7346

**SECTION 10: Stability and reactivity****10.1. Reactivity**

The product is stable under storage at normal ambient temperatures.

**10.2. Chemical stability**

The mixture is chemically stable under recommended conditions of storage, use and temperature.

**10.3. Possibility of hazardous reactions**

No known hazardous reactions.

**10.4. Conditions to avoid**

Refer to chapter 7 No further action is necessary.

Do not overheat to avoid decomposition by heat.

**10.5. Incompatible materials**

Oxidising agent, strong. Acid.

**10.6. Hazardous decomposition products**In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO<sub>2</sub>). Sulfur oxides. Phosphorus oxides. Nitrogen oxides (NO<sub>x</sub>). carbon black. No known hazardous decomposition products.**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

Based on available data, the classification criteria are not met.

Mixture not tested.

**ATE<sub>mix</sub> calculated**

ATE (oral) &gt; 2000 mg/kg; ATE (dermal) &gt; 2000 mg/kg; ATE (inhalation vapour) &gt; 20 mg/l; ATE (inhalation dust/mist) &gt; 5 mg/l

| CAS No      | Chemical name                                                      |                      |         |                     |                                          |
|-------------|--------------------------------------------------------------------|----------------------|---------|---------------------|------------------------------------------|
|             | Exposure route                                                     | Dose                 | Species | Source              | Method                                   |
| 64742-54-7  | Distillates (petroleum), hydrotreated heavy paraffinic             |                      |         |                     |                                          |
|             | oral                                                               | LD50 > 5000 mg/kg    | Rat     | Study report (1982) | OECD Guideline 401                       |
|             | dermal                                                             | LD50 > 5000 mg/kg    | Rabbit  | Study report (1982) | OECD Guideline 402                       |
| 70024-69-0  | Benzenesulfonic acid, mono-C16-24-alkyl derivatives, calcium salts |                      |         |                     |                                          |
|             | oral                                                               | LD50 > 16000 mg/kg   | Rat     | Study report (1981) | other: Section 772 .112-21 CFR 40        |
|             | dermal                                                             | LD50 > 4000 mg/kg    | Rabbit  | Study report (1986) | other: 40 CFR, Section 163.81-2, Federal |
| 121158-58-5 | Phenol, dodecyl-, branched                                         |                      |         |                     |                                          |
|             | oral                                                               | LD50 2100 mg/kg      | Rat     | Publication (1978)  | OECD Guideline 401                       |
|             | dermal                                                             | LD50 ca. 15000 mg/kg | Rabbit  | Study report (1968) | OECD Guideline 402                       |

**Irritation and corrosivity**

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL Marine MS 4011**

Revision date: 23.06.2026

Product code: 723004

Page 9 of 13

**Sensitising effects**

Based on available data, the classification criteria are not met.

Contains Benzenesulfonic acid, mono-C16-24-alkyl derivatives, calcium salts. May produce an allergic reaction.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

**STOT-single exposure**

Based on available data, the classification criteria are not met.

**STOT-repeated exposure**

Based on available data, the classification criteria are not met.

Prolonged/repetitive skin contact may cause skin defatting or dermatitis.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**11.2. Information on other hazards****Endocrine disrupting properties**

not applicable

**SECTION 12: Ecological information****12.1. Toxicity**

Harmful to aquatic life with long lasting effects.

Mixture not tested.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL Marine MS 4011**

Revision date: 23.06.2026

Product code: 723004

Page 10 of 13

| CAS No      | Chemical name                                                      |                       |           |                                                     |                                   |                                         |
|-------------|--------------------------------------------------------------------|-----------------------|-----------|-----------------------------------------------------|-----------------------------------|-----------------------------------------|
|             | Aquatic toxicity                                                   | Dose                  | [h]   [d] | Species                                             | Source                            | Method                                  |
| 64742-54-7  | Distillates (petroleum), hydrotreated heavy paraffinic             |                       |           |                                                     |                                   |                                         |
|             | Acute fish toxicity                                                | LL50 > 100 mg/l       | 96 h      | Pimephales promelas                                 | Study report (1995)               | OECD Guideline 203                      |
|             | Acute algae toxicity                                               | ErC50 >100 mg/l       | 72 h      |                                                     |                                   |                                         |
|             | Fish toxicity                                                      | NOEC >= 1000 mg/l     | 14 d      | Oncorhynchus mykiss                                 | CONCAWE, Brussels, Belgium (2010) | The aquatic toxicity was estimated by a |
| 70024-69-0  | Benzenesulfonic acid, mono-C16-24-alkyl derivatives, calcium salts |                       |           |                                                     |                                   |                                         |
|             | Acute fish toxicity                                                | LL50 > 10000 mg/l     | 96 h      | Cyprinodon variegatus                               | REACH Registration Dossier        | OECD Guideline 203                      |
|             | Acute algae toxicity                                               | ErC50 > 1000 mg/l     | 72 h      | Pseudokirchneriella subcapitata                     | REACH Registration Dossier        | EPA OTS 797.1050                        |
|             | Acute crustacea toxicity                                           | EC50 > 1000 mg/l      | 48 h      | Daphnia magna                                       | REACH Registration Dossier        | EPA OTS 797.1300                        |
|             | Acute bacteria toxicity                                            | EC50 > 10000 mg/l ( ) | 3 h       | activated sludge of a predominantly domestic sewage | REACH Registration Dossier        | OECD Guideline 209                      |
| 121158-58-5 | Phenol, dodecyl-, branched                                         |                       |           |                                                     |                                   |                                         |
|             | Acute fish toxicity                                                | LL50 40 mg/l          | 96 h      | Pimephales promelas                                 | Study report (1994)               | OECD Guideline 203                      |
|             | Acute algae toxicity                                               | ErC50 0,15 mg/l       | 72 h      | Desmodesmus subspicatus                             | Study report (2005)               | OECD Guideline 201                      |
|             | Acute crustacea toxicity                                           | EC50 0,037 mg/l       | 48 h      | Daphnia magna                                       | Study report (2005)               | OECD Guideline 202                      |
|             | Crustacea toxicity                                                 | NOEC 0,004 mg/l       | 21 d      | Daphnia magna                                       | Study report (2005)               | OECD Guideline 211                      |
|             | Acute bacteria toxicity                                            | EC50 > 1000 mg/l ( )  | 3 h       | activated sludge of a predominantly industrial sew  | Study report (2004)               | OECD Guideline 209                      |

**12.2. Persistence and degradability**

Not easily bio-degradable (according to OECD-criteria). Do not allow to enter into surface water or drains.

**12.3. Bioaccumulative potential**

No data available

**Partition coefficient n-octanol/water**

| CAS No      | Chemical name                                                      | Log Pow |
|-------------|--------------------------------------------------------------------|---------|
| 70024-69-0  | Benzenesulfonic acid, mono-C16-24-alkyl derivatives, calcium salts | 18,05   |
| 121158-58-5 | Phenol, dodecyl-, branched                                         | 7,14    |

**BCF**

| CAS No      | Chemical name              | BCF | Species             | Source              |
|-------------|----------------------------|-----|---------------------|---------------------|
| 121158-58-5 | Phenol, dodecyl-, branched | 289 | Oncorhynchus mykiss | Study report (2006) |

**12.4. Mobility in soil**

Due to its low solubility in water the product is almost completely mechanically separated in biological waste water treatment plants.

**12.5. Results of PBT and vPvB assessment**

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL Marine MS 4011**

Revision date: 23.06.2026

Product code: 723004

Page 11 of 13

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**12.7. Other adverse effects**

No data available

**Further information**

Do not allow uncontrolled leakage of product into the environment.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations**

Must not be disposed of with domestic refuse. Do not allow to enter into surface water or drains.

**List of Wastes Code - residues/unused products**

130205 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste engine, gear and lubricating oils; mineral-based non-chlorinated engine, gear and lubricating oils; hazardous waste

**Contaminated packaging**

Contaminated packages must be completely emptied and can be re-used following proper cleaning. Dispose of waste according to applicable legislation. Packing which cannot be properly cleaned must be thrown away.

**SECTION 14: Transport information****Land transport (ADR/RID)**

**14.1. UN number or ID number:** -  
**14.2. UN proper shipping name:** -  
**14.3. Transport hazard class(es):** -  
**14.4. Packing group:** -

**Inland waterways transport (ADN)**

**14.1. UN number or ID number:** -  
**14.2. UN proper shipping name:** -  
**14.3. Transport hazard class(es):** -  
**14.4. Packing group:** -

**Marine transport (IMDG)**

**14.1. UN number or ID number:** -  
**14.2. UN proper shipping name:** -  
**14.3. Transport hazard class(es):** -  
**14.4. Packing group:** -

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number or ID number:** -  
**14.2. UN proper shipping name:** -  
**14.3. Transport hazard class(es):** -  
**14.4. Packing group:** -

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

Unless specified otherwise, general measures for safe transport must be followed.

**14.7. Maritime transport in bulk according to IMO instruments**

not applicable

**Other applicable information**

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL Marine MS 4011**

Revision date: 23.06.2026

Product code: 723004

Page 12 of 13

No dangerous good in sense of these transport regulations.

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):

Phenol, dodecyl-, branched

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 28, Entry 30, Entry 75

**National regulatory information**

Water hazard class (D):

1 - slightly hazardous to water

**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information****Changes**

This data sheet contains changes from the previous version in section(s): 2,3,5,6,8,9,10,12,16.

**Abbreviations and acronyms**

Skin Corr: Skin corrosion

Eye Dam: Eye damage

Skin Sens: Skin sensitisation

Repr: Reproductive toxicity

Aquatic Acute: Acute aquatic hazard

Aquatic Chronic: Chronic aquatic hazard

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ASTM - American Society for the Testing of Materials; ATE - Acute Toxicity Estimates; bw - Body weight; CAO - Cargo Aircraft Only; CAS - Chemical Abstracts Service; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DNEL - Derived No-Effect Level; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); EG - European Union; EN - European standards; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; OECD - Organization for Economic Co-operation and Development; PBT - Persistent, Bioaccumulative and Toxic substance; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulation concerning the International Carriage of Dangerous Goods by Rail; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL Marine MS 4011**

Revision date: 23.06.2026

Product code: 723004

Page 13 of 13

**Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]**

|                         |                          |
|-------------------------|--------------------------|
| Classification          | Classification procedure |
| Aquatic Chronic 3; H412 | Calculation method       |

**Relevant H and EUH statements (number and full text)**

|        |                                                                                                                |
|--------|----------------------------------------------------------------------------------------------------------------|
| H314   | Causes severe skin burns and eye damage.                                                                       |
| H317   | May cause an allergic skin reaction.                                                                           |
| H318   | Causes serious eye damage.                                                                                     |
| H360F  | May damage fertility.                                                                                          |
| H400   | Very toxic to aquatic life.                                                                                    |
| H410   | Very toxic to aquatic life with long lasting effects.                                                          |
| H412   | Harmful to aquatic life with long lasting effects.                                                             |
| EUH208 | Contains Benzenesulfonic acid, mono-C16-24-alkyl derivatives, calcium salts. May produce an allergic reaction. |

**Further Information**

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

*(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*