

# SAFETY DATA SHEET according to Regulation 1907/2006

Product name: **MCU-ALUTOPCOAT**

Creation date: **3.10.2011**

Revision: : **6.11.2012**

Version: **1**

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### 1.1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION

Product name:

MCU-ALUTOPCOAT

Product code:

no information



chemius.net/ijt4e

### 1.2. USE OF THE SUBSTANCE/PREPARATION

Use:

Coating

Uses advised against:

no information

### 1.3. COMPANY/UNDERTAKING IDENTIFICATION

Supplier

MCU Coatings International S.L.

Address: Partida La Olla 1 Edificio Atalaya del Mar Local 6, 03590 ALTEA (ALICANTE), Spain

Tel.: +34 965 84 14 36

e-mail: info@mcucoatings.com

Point of contact for safety info: MCU Coatings

### 1.4. EMERGENCY TELEPHONE

Emergency:

112

Supplier:

+34 965 84 14 36

## 2. HAZARDS IDENTIFICATION

### 2.1 CLASSIFICATION OF SUBSTANCE/PREPARATION

Classification according to Reg. 1272/2008 (CLP)

H304: May be fatal if swallowed and enters airways.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H332: Harmful if inhaled.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335: May cause respiratory irritation.

H351: Suspected of causing cancer < state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard> .

H373: May cause damage to organs < or state all organs affected, if known> through prolonged or repeated exposure < state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard> .

H412: Harmful to aquatic life with long lasting effects.

# SAFETY DATA SHEET according to Regulation 1907/2006

Product name: **MCU-ALUTOPCOAT**

Creation date: **3.10.2011**

Revision: : **6.11.2012**

Version: **1**

...continued from previous page

## Classification according to directive 67/548/EEC or. 99/45/EC

Xn: Harmful

(R10) Flammable.

(R20) Harmful by inhalation.

(R36/37/38) Irritating to eyes, respiratory system and skin.

(R40) Limited evidence of a carcinogenic effect.

(R42/43) May cause sensitisation by inhalation and skin contact.

(R48/20) Harmful: danger of serious damage to health by prolonged exposure through inhalation.

(R52/53) Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

(R65) Harmful: may cause lung damage if swallowed.

## 2.2 LABEL ELEMENTS



Signal word: **Danger**

H304: May be fatal if swallowed and enters airways.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H332: Harmful if inhaled.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335: May cause respiratory irritation.

H351: Suspected of causing cancer < state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard> .

H373: May cause damage to organs < or state all organs affected, if known> through prolonged or repeated exposure < state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard> .

H412: Harmful to aquatic life with long lasting effects.

EUH014: Reacts violently with water.

P202: Do not handle until all safety precautions have been read and understood.

P231 + P232: Handle under inert gas. Protect from moisture.

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P337 + P313: If eye irritation persists: Get medical advice/attention.

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

P501: Dispose of contents/container in accordance with local regulation.

## 2.3. Other hazards

No information

## 2.4. Contains:

Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.-hydro-.omega.- hydroxypoly(oxy(methyl- 1,2-ethanediyl))

Diphenylmethandiisocyanat, isomers and homologues

Methyloxirane, polymer with oxirane, ether with oxybis(propanol), polymer with 1,1'- methylenebis(isocyanatobenzene), methyloxirane and oxirane

o-(p-isocyanatobenzyl)phenyl isocyanate

Reaction mass of 4,4'-methylenediphenyldiisocyanate and o-(p isocyanatobenzyl) isocyanate

4-isocyanatosulphonyltoluene

# SAFETY DATA SHEET according to Regulation 1907/2006

Product name: **MCU-ALUTOPCOAT**

Creation date: **3.10.2011**

Revision: : **6.11.2012**

Version: **1**

...continued from previous page

## 2.5. Special provisions

### MDI notice

Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

|   |                      |                                     |
|---|----------------------|-------------------------------------|
| - | Substance:           | <input type="checkbox"/>            |
| - | Preparation/mixture: | <input checked="" type="checkbox"/> |

| Chemical name  | CAS<br>EC<br>Index                      | %      | Classification<br>according to<br>Regulation (EC) No<br>1272/2008 [CLP]   | Classification<br>according to<br>directive<br>67/548/EEC or<br>99/45/EC | REACH<br>reg.<br>number |
|--|---|--------|---|--|-------------------------|
| Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy(methyl- 1,2-ethanediyl))                  | 53862-89-8<br>-<br>-                    | 10-25  | Skin Irrit. 2; H315<br>Skin Sens. 1; H317<br>Eye Irrit. 2; H319<br>Acute Tox. 4; H332<br>Resp. Sens. 1; H334<br>STOT SE 3; H335<br>Carc. 2; H351<br>STOT RE 2; H373 | Carc. Cat. 3; R40<br>Xn; R20-42/43-48/20<br>Xi; R36/37/38                | -                       |
| 4,4'-methylenediphenyl diisocyanate <sup>(C)</sup>   | 101-68-8<br>202-966-0<br>615-005-00-9   | 2,5-10 | Skin Irrit. 2; H315<br>Skin Sens. 1; H317<br>Eye Irrit. 2; H319<br>Acute Tox. 4; H332<br>Resp. Sens. 1; H334<br>STOT SE 3; H335<br>Carc. 2; H351<br>STOT RE 2; H373 | Carc. Cat. 3; R40<br>Xn; R20-42/43-48/20<br>Xi; R36/37/38                | -                       |
| aluminium powder (stabilised) <sup>(T)</sup>   | 7429-90-5<br>231-072-3<br>013-002-00-1  | 10-25  | Flam. Sol. 1; H228<br>Water-react. 2; H261  | F; R11-15  | -                       |
| Diphenylmethandiisocyanat, isomers and homologues  | 9016-87-9<br>202-966-0<br>-             | 2,5-10 | Skin Irrit. 2; H315<br>Skin Sens. 1; H317<br>Eye Irrit. 2; H319<br>Acute Tox. 4; H332<br>Resp. Sens. 1; H334<br>STOT SE 3; H335<br>Carc. 2; H351<br>STOT RE 2; H373 | Carc. Cat. 3; R40<br>Xn; R20-42/43-48/20<br>Xi; R36/37/38                | -                       |
| Methyloxirane, polymer with oxirane, ether with oxybis(propanol), polymer with 1,1'-methylenebis(isocyanatobenzene), methyloxirane and oxirane | 157937-75-2<br>-<br>-                   | 2,5-10 | Skin Irrit. 2; H315<br>Skin Sens. 1; H317<br>Eye Irrit. 2; H319<br>Acute Tox. 4; H332<br>Resp. Sens. 1; H334<br>STOT SE 3; H335<br>Carc. 2; H351<br>STOT RE 2; H373 | Carc. Cat. 3; R40<br>Xn; R20-42/43-48/20<br>Xi; R36/37/38                | -                       |
| Naphtha (petroleum), hydrotreated heavy <sup>(H, P)</sup>  | 64742-48-9<br>265-150-3<br>649-327-00-6 | 2,5-10 | Asp. Tox. 1; H304   | Xn; R65<br>R66   | -                       |

# SAFETY DATA SHEET according to Regulation 1907/2006

Product name: **MCU-ALUTOPCOAT**

Creation date: **3.10.2011**

Revision: : **6.11.2012**

Version: **1**

...continued from previous page

|   |   |        |   |   |   |
|---|---|--------|---|---|---|
| Xylene <i>(C)</i>   | 1330-20-7<br>215-535-7<br>601-022-00-9  | 2,5-10 | Flam. Liq. 3; H226<br>Skin Irrit. 2; H315<br>Acute Tox. 4; H312,<br>H332  | Xn; R20/21<br>Xi; R38<br>R10                                  | - |
| tetraethyl silicate   | 78-10-4<br>201-083-8<br>014-005-00-0    | 2,5-10 | Flam. Liq. 3; H226<br>Eye Irrit. 2; H319<br>Acute Tox. 4; H332<br>STOT SE 3; H335   | Xn; R20<br>Xi; R36/37<br>R10                                  | - |
| Solvent naphtha (petroleum), light arom. <i>(H, P)</i>                                    | 64742-95-6<br>265-199-0<br>649-356-00-4 | <2,5   | Flam. Liq. 1; H224<br>Asp. Tox. 1; H304<br>STOT SE 3; H335<br>Aquatic Chronic 2;<br>H411  | Xn; R65<br>Xi; R37<br>N; R51/53<br>R10                        | - |
| o-(p-isocyanatobenzyl)phenyl isocyanate <i>(C)</i>  | 5873-54-1<br>227-534-9<br>615-005-00-9  | <2,5   | Skin Irrit. 2; H315<br>Skin Sens. 1; H317<br>Eye Irrit. 2; H319<br>Acute Tox. 4; H332<br>Resp. Sens. 1; H334<br>STOT SE 3; H335<br>Carc. 2; H351<br>STOT RE 2; H373 | Carc. Cat. 3; R40<br>Xn; R20-42/43-<br>48/20<br>Xi; R36/37/38 | - |
| triethyl orthoformate   | 122-51-0<br>204-550-4<br>-              | <2,5   |   | Xi; R36/38<br>R10   | - |
| Reaction mass of 4,4'-methylenediphenyldiisocyanate and o-(p isocyanatobenzyl) isocyanate | -<br>905-806-4<br>-                     | <2,5   | Skin Irrit. 2; H315<br>Skin Sens. 1; H317<br>Eye Irrit. 2; H319<br>Acute Tox. 4; H332<br>Resp. Sens. 1; H334<br>STOT SE 3; H335<br>Carc. 2; H351<br>STOT RE 2; H373 | Carc. Cat. 3; R40<br>Xn; R20-42/43-<br>48/20<br>Xi; R36/37/38 | - |
| 4-isocyanatosulphonyltoluene  | 4083-64-1<br>223-810-8<br>615-012-00-7  | <2,5   | Skin Irrit. 2; H315<br>Eye Irrit. 2; H319<br>Resp. Sens. 1; H334<br>STOT SE 3; H335   | Xn; R42<br>Xi; R36/37/38<br>R14                               | - |

# SAFETY DATA SHEET according to Regulation 1907/2006

Product name: **MCU-ALUTOPCOAT**

Creation date: **3.10.2011**

Revision: : **6.11.2012**

Version: **1**

...continued from previous page

## Notes for substances:

|          |  |
|----------|--|
| <b>T</b> | This substance may be marketed in a form which does not have the physical hazards as indicated by the classification in the entry in Part 3. If the results of the relevant method or methods in accordance with Part 2 of Annex I of this Regulation show that the specific form of substance marketed does not exhibit this physical property or these physical hazards, the substance shall be classified in accordance with the result or results of this test or these tests. Relevant information, including reference to the relevant test method(s) shall be included in the safety data sheet.  |
| <b>C</b> | Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers.<br><br>In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.  |
| <b>H</b> | The classification and labelling shown for this substance applies to the hazardous property(ies) indicated by the hazard statement(s) in combination with the hazard class(es) and category(ies) shown. The requirements of Article 4 for manufacturers, importers or downstream users of this substance apply to all other hazard classes and categories. For hazard classes where the route of exposure or the nature of the effects leads to a differentiation of the classification of the hazard class, the manufacturer, importer or downstream user is required to consider the routes of exposure or the nature of the effects not already considered.<br><br>The final label shall follow the requirements of Article 17 and of section 1.2 of Annex I. |
| <b>P</b> | The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7).<br><br>When the substance is not classified as a carcinogen at least the precautionary statements (P102-)P260-P262-P301 + P310-P331 (Table 3.1) or the S-phrases (2-)23-24-62 (Table 3.2) shall apply.<br><br>This note applies only to certain complex oil-derived substances in Part 3.   |

## 4. FIRST AID MEASURES

### 4.1. First-aid measures

#### General measures:

Never give anything by mouth or induce vomiting, if the person is unconscious. When in doubt or if symptoms do not disappear seek medical help.

#### Skin contact:

Immediately remove contaminated clothing. Wash thoroughly with plenty of water and soap! If feeling unwell seek medical help.

#### Eye contact:

If irritation does not stop, seek professional medical treatment! Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.

#### Inhalation:

Remove patient to fresh air-move out of dangerous area. If victim has difficulties with breathing or is not breathing give artificial respiration. Seek medical help.

#### Ingestion:

Consult a physician. Show the physician the Safety Data Sheet or label. Do not induce vomiting. Rinse mouth with water.

### 4.2. Symptoms

#### Skin contact:

Irritating to the skin.  
May cause sensitisation by skin contact.  
May cause allergic dermatitis.

# SAFETY DATA SHEET according to Regulation 1907/2006

Product name: **MCU-ALUTOPCOAT**

Creation date: **3.10.2011**

Revision: : **6.11.2012**

Version: **1**

...continued from previous page

## Eye contact:

Redness, tearing, pain.  
Causes redness and pain.

## Inhalation:

Causes irritation of respiratory ways.  
Harmful.  
Can cause sensitization.  
Causes cough and problems with breathing.

## Ingestion:

Irritates mucous membranes in the mouth, throat, esophagus and in gastrointestinal area.

## 5. FIRE-FIGHTING MEASURES

### 5.1. Suitable extinguishing media:

Chemical powder.  
Carbon dioxide (CO<sub>2</sub>).  
Alcohol-resistant foam.  
Sand.

### 5.2. Extinguishing media which must not be used for safety reasons:

Water;

### 5.3. Special exposure hazards:

#### Hazardous combustion products:

In case of heating harmful vapours/gases can be generated. In the event of fire the following can be generated: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>). In the event of a fire can produce dangerous fumes.

### 5.4. Advice for firefighters:

#### Protective actions:

Cool containers at risk with water spray jet. If possible remove containers from endangered area. Contaminated firefighting water and fire residues must be disposed of in accordance with the local regulations.

#### Special protective equipment for fire-fighters:

Fire-fighters should wear appropriate protective clothing for fire-fighters (including helmets, protective boots and gloves) (EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (EN 137) .

### 5.5. Additional information:

-

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1. Personal safety precautions:

Use personal protective equipment (point 8). Ensure adequate ventilation. Keep away from sources of ignition; No smoking!

# SAFETY DATA SHEET according to Regulation 1907/2006

Product name: **MCU-ALUTOPCOAT**

Creation date: **3.10.2011**

Revision: : **6.11.2012**

Version: **1**

...continued from previous page

## 6.2. Environmental precautions:

Do not allow product to reach water/drains/sewage systems or permeable soil. If accidental entry into water or ground occurs, inform responsible authorities.

## 6.3. Methods for cleaning up:

Absorb product (with inert material), collect it in special container and dispose it according to valid regulations on handling with waste.

## 7. HANDLING AND STORAGE

### 7.1. Handling:

Use good personal hygiene practices-wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Avoid contact with skin and eyes. Do not breathe vapours/mist. Ensure adequate ventilation. Keep away from sources of ignition - No smoking. Use spark-proof tools. Take precautionary measures against static discharges.

### 7.2. Storage - technical measures and storage conditions:

Keep in cool and good ventilated area. Keep unauthorized personnel out. Protect from open fire, heat and direct sunlight. Keep away from food, drink and animal feedingstuffs. Keep away from moisture and water. Keep in tightly closed container. Do not store above 35°C. Avoid contact with water. Close open containers after use. Put the container upright to prevent from leaking.

### 7.3. Compatible packaging materials

Stainless steel.

### 7.4. Specific use(s):

-

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Exposure limit values (IUCPID)

| Chemical name   | value                 | interval x time                   | Type     |
|---|-----------------------|-----------------------------------|----------|
| triethyl orthoformate (122-51-0)                      | 10 mg/m <sup>3</sup>  | 20 mg/m <sup>3</sup> (1 x 15min)  | MAK (DE) |
| Xylene (1330-20-7)                                    | 100 ml/m <sup>3</sup> | 150 ml/m <sup>3</sup> (4 x 15min) | OES (UK) |
| Naphtha (petroleum), hydrotreated heavy (64742-48-9)  | 1 ppm                 | 10 mg/m <sup>3</sup> (4 x 15min)  | TRK (DE) |
| Solvent naphtha (petroleum), light arom. (64742-95-6) | 50 ppm                | 10 mg/m <sup>3</sup> (4 x 15min)  | TLV (US) |
| aluminium powder (stabilised) (7429-90-5)             | 1.5 mg/m <sup>3</sup> | 7200 mg/m <sup>3</sup> (4 x 8h)   | MAK (DE) |

Source: IUCPID (For information only)

### 8.2. Exposure limit values

| Chemical name | mg/m <sup>3</sup> | ml/m <sup>3</sup> | KTV | Exposure limit values |
|---------------|-------------------|-------------------|-----|-----------------------|
| Xylene        | 440               | 100               | 0   |                       |

### 8.3. Occupational exposure controls

Use good personal hygiene practices-wash hands at breaks and when done working with material.

# SAFETY DATA SHEET according to Regulation 1907/2006

Product name: **MCU-ALUTOPCOAT**

Creation date: **3.10.2011**

Revision: : **6.11.2012**

Version: **1**

...continued from previous page

## 8.4. Exposure controls

-

## 8.5. Personal protection equipment:

### Respiratory protection:

In case of insufficient ventilation wear suitable respiratory protection. Filter typ A.

### Hand protection:

Protective gloves.

### Eye protection:

Safety glasses with side protection. (EN 166)

### Skin protection:

Protective working garments.

## 8.6. Appropriate engineering control

### Technical measures to prevent exposure

Provide good ventilation and local exhaust in the area with increased concentration. Keep away from food, drink and animal feedingstuffs

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. General information

|   |                        |                |
|---|------------------------|----------------|
| - | <b>Physical state:</b> | liquid         |
| - | <b>Colour:</b>         | aluminium      |
| - | <b>Odour:</b>          | characteristic |

### 9.2. Important health, safety and environmental information

|   |                                    |   |
|---|------------------------------------|---|
| - | <b>pH</b>                          | no information                                      |
| - | <b>Boiling point/boiling range</b> | no information                                      |
| - | <b>Flashpoint</b>                  | < 23 °C   |
| - | <b>Ignition temperature</b>        | no information                                      |
| - | <b>Explosion limits (vol%)</b>     | no information                                      |
| - | <b>Vapour pressure</b>             | no information                                      |
| - | <b>Relative density</b>            | <b>Density:</b><br>1.261 g/cm <sup>3</sup> at 20 °C |
| - | <b>Vapour density</b>              | no information                                      |
| - | <b>Solubility</b>                  | <b>Organic solvent:</b><br>Soluble                  |
| - | <b>Weight organic solvents</b>     | 220 g/l   |
| - | <b>Solid contents</b>              | 83.3 %  |



# SAFETY DATA SHEET according to Regulation 1907/2006

Product name: **MCU-ALUTOPCOAT**

Creation date: **3.10.2011**

Revision: : **6.11.2012**

Version: **1**

...continued from previous page

## 9.3. OTHER INFORMATION

|   |          |  |
|---|----------|--|
| - | Remarks: |  |
|---|----------|--|

## 10. STABILITY AND REACTIVITY

### 10.1. Stability

Product is stable under normal conditions according to handling and storage.

### 10.2. Conditions to avoid

Keep away from heat and sources of ignition. Do not expose to temperatures exceeding 35° C.

### 10.3. Materials to avoid

Strong acids.  
Strong bases.  
Oxidants.

### 10.4. Hazardous decomposition products

Under normal use conditions no hazardous decomposition products expected. In case of fire/explosion vapours dangerous for health are spread. At high temperatures CO<sub>2</sub>, carbon monoxide (incomplete combustion), smoke.

## 11. TOXICOLOGICAL INFORMATION

### 11.1. Toxicological information for the product (chemical)

#### 11.1.1. Effects:

no information

#### 11.1.2. Specific effects on human health:

- **Carcinogenic effects:** Can cause cancer.
- **Mutagenic effects:** no data
- **Toxic for reproduction:** no data

#### 11.1.3. Acute toxicity:

no information

# SAFETY DATA SHEET according to Regulation 1907/2006

Product name: **MCU-ALUTOPCOAT**

Creation date: **3.10.2011**

Revision: : **6.11.2012**

Version: **1**

...continued from previous page

## 11.2. Toxicological information for components/constituents

### 11.2.1. Effects:

#### **NAPHTHA (PETROLEUM), HYDROTREATED HEAVY**

- **Skin contact:** Prolonged and repeated contact can cause dermatitis.
- **Eye contact:** May cause irritation.
- **Inhalation:** Vapours and aerosols of unusually high concentrations (in poorly ventilated or enclosed spaces) may cause respiratory irritation, headache, nausea, vomiting, dizziness, and in extreme cases unconsciousness and even asphyxiation.
- **Ingestion:** May cause digestive tract irritation, nausea and vomiting. If product gets into the lungs (during swallowing or vomiting) may cause lung damage.

#### **XYLENE**

- **Skin contact:** Acute dermal toxicity: non-toxic. Primary skin irritation: not irritating effect. Causes dermatitis.
- **Eye contact:** Primary eye irritation and corrosive effects: the material has minimal ocular irritant effects on mucous membranes by the repeated application (k = 100 mg).
- **Inhalation:** Chronic poisoning is characterized by nervous disorders (headache, drowsiness), gastrointestinal disorders and irritant effects on skin. The vapor of xylene has narcotic effect on the nervous system. Acute effects of vapor: dizziness, strong heartbeat, asthma, the affected person is restless and may vomit. In severe cases there may be loss of consciousness.
- **Ingestion:** n.d.

### 11.2.2. Acute toxicity of ingredients/constituents

| CAS                                     | Routes of exposure   |  |  |
|---|--|--|--|
|   | Oral   | Dermal   | Inhalation   |
| 1330-20-7                               | LD <sub>50</sub> /mouse: > 1590 mg/kg<br>LD <sub>50</sub> /rat: > 4300 mg/kg<br>LD <sub>50</sub> /rat: 4300 - 8700 mg/kg * | LD <sub>50</sub> /rabbit: 4350 - 2000 mg/kg *<br>LD <sub>50</sub> /rabbit: 3160 - 20000 mg/kg *  | LC <sub>50</sub> /rat/4h: 6350 - 18.3 ppm *<br>LC <sub>50</sub> /rat/4h: 47635 - 18.3 mg/l *             |
| 5873-54-1                               |  | LD <sub>50</sub> /rabbit: > 9400 mg/kg<br>LD <sub>50</sub> /rabbit: > 9400 mg/kg                 | LC <sub>50</sub> /dust/aerosol/4h/rat: > 0.49 mg/l<br>LC <sub>50</sub> /dust/aerosol/4h/rat: > 0.49 mg/l |
| 122-51-0                                | LD <sub>50</sub> /rat: 7060 - 1650 mg/kg *   | LD <sub>50</sub> /rabbit: 18000 - 1250 mg/kg *<br>LD <sub>50</sub> /rabbit: 3160 - 20000 mg/kg * | LC <sub>50</sub> /rat/8h: 4000 - 4.8 ppm *<br>LC <sub>50</sub> /rat/6h: 14.4 - 39 mg/l *                 |
| 64742-48-9                              | LD <sub>50</sub> /rat: 5000 - 6000 mg/kg *<br>LD <sub>50</sub> /rat: 15000 - 6000 mg/kg *                                  | LD <sub>50</sub> /rabbit: 3160 - 20000 mg/kg *<br>LD <sub>50</sub> /rabbit: 3160 - 20000 mg/kg * | LC <sub>50</sub> /rat/6h: 12 - 39 mg/l *<br>LC <sub>50</sub> /rat/6h: 14.4 - 39 mg/l *                   |
| 64742-95-6                              | LD <sub>50</sub> /rat: 3500 - 6000 mg/kg *<br>LD <sub>50</sub> /rat: 5000 - 6000 mg/kg *                                   | LD <sub>50</sub> /rabbit: 2000 - 20000 mg/kg *<br>LD <sub>50</sub> /rabbit: 3160 - 20000 mg/kg * | LC <sub>50</sub> /rat/4h: 5.2 - 39 mg/l *<br>LC <sub>50</sub> /rat/6h: 14.4 - 39 mg/l *                  |
| 7429-90-5                               | LD <sub>50</sub> /mouse: 2050 - 3200 mg/kg *<br>LD <sub>50</sub> /rat: 5000 - 6000 mg/kg *                                 | LD <sub>50</sub> /rat: 5000 - 1050 mg/kg *<br>LD <sub>50</sub> /rabbit: 3160 - 20000 mg/kg *     | LC <sub>50</sub> /rat/4h: 5.06 - 366 mg/l *<br>LD <sub>50</sub> /rabbit: 3160 - 20000 mg/kg *            |
| * Source: IUCLID (For information only) |  |  |  |

## 12. ECOLOGICAL INFORMATION

### 12.1. Ekotoxicity (product/chemical)

Do not allow to enter ground water, water course or sewage system.

Harmful to aquatic organisms. May cause long term adverse effects in the aquatic environment.

# SAFETY DATA SHEET according to Regulation 1907/2006

Product name: **MCU-ALUTOPCOAT**

Creation date: **3.10.2011**

Revision: : **6.11.2012**

Version: **1**

...continued from previous page

## 12.1.1. Bioaccumulative potential

### - Partition coefficient:

no information

### - Bioconcentration factor: -

## 12.1.2. Biodegradability

### - Biodegradability:

-

### - BOD(5days)/COD ratio: -

## 12.1.3. Acute toxicity

no information

## 12.1.4. Chronic toxicity

no information

## 12.1.5. Abiotic degradation

no information

## 12.1.6. Biodegradation

no information

## 12.1.7. Mobility

no information

## 12.1.8. Additional information

-

## **12.2. Ekotoxicity (components/constituents)**

### **Acute toxicity**

| Substance (CAS Nr.)                                 | Type             | Value        | Exposure time | Species               | Organism | Method |
|---|------------------|--------------|---------------|-----------------------|----------|--------|
| Xylene (1330-20-7)                                  | LC <sub>50</sub> | 13.5-42 mg/L | 96 h          | fish                  |          |        |
| o-(p-isocyanatobenzyl)phenyl isocyanate (5873-54-1) | EC <sub>50</sub> | >1000 mg/L   | 48 h          | aquatic invertebrates |          |        |
|   | LC <sub>50</sub> | >1000 mg/L   | 96 h          | fish                  |          |        |
|   | NOEC             | >10 mg/L     | 0             | daphnia               |          |        |
|   | EC <sub>50</sub> | >1000 mg/L   | 48 h          | aquatic invertebrates |          |        |
|   | LC <sub>50</sub> | >1000 mg/L   | 96 h          | fish                  |          |        |
|   | NOEC             | >10 mg/L     | 0             | daphnia               |          |        |

# SAFETY DATA SHEET according to Regulation 1907/2006

Product name: **MCU-ALUTOPCOAT**

Creation date: **3.10.2011**

Revision: : **6.11.2012**

Version: **1**

...continued from previous page

## 12.3. Acute toxicity of ingredients (IUCLID)

| CAS        | Species  |  |   |
|------------|--|--|---|
|            | Fish   | Daphnia  | Algae   |
| 64742-95-6 | LC50/96h: 9.22 - 22 mg/l *<br>LC50/24h: 58 - 22 mg/l *                 | EC50/48h: 6.14 - 10000 mg/l *<br>EC50/96h: 6.14 - 10000 mg/l *               | LC50/72h: 3.29 - 10 mg/l *<br>LC50/72h: 19 - 10 mg/l *            |
| 1330-20-7  | LC50/48h: 86 - 308 mg/l *<br>LC50/96h: 13500 - 17300 micrograms/l *    | EC50/96h: 500 - 18000 micrograms/l *<br>EC50/24h: 500 - 18000 micrograms/l * | LC50/72h: 100 - 3.92 micrograms/l *<br>LC50/72h: 10 - 1000 mg/l * |
| 122-51-0   | LC50/48h: 592 - 166.6 mg/l *<br>LC50/96h: 13500 - 17300 micrograms/l * |  |   |
| 7429-90-5  | LC50/96h: 1000 - 693 mg/l *<br>LC50/96h: 1000 - 693 mg/l *             | EC50/24h: 100 - 390 mg/l *<br>EC50/48h: 100 - 390 mg/l *                     | LC50/96h: 10 - 1000 mg/l *<br>LC50/72h: 10 - 1000 mg/l *          |
| 64742-48-9 | LC50/96h: 2200 - 22 mg/l *<br>LC50/96h: 1000 - 693 mg/l *              | EC50/96h: 10000 - 10000 mg/l *<br>EC50/24h: 500 - 18000 micrograms/l *       |   |

Source: IUCLID (For information only)

## 13. DISPOSAL CONSIDERATIONS

### 13.1. Waste chemical:

Disposal must be made according to official regulations: to leave it to authorized collector/remover/transformer of hazardous waste.

### 13.2. European Waste Catalogue number:

no information

### 13.3. Packaging:

Completely emptied container dispose according to regulations. Uncleaned containers should not be perforated, cut or welded.

### 13.4. European Waste Catalogue number:

no information

### 13.5. Remarks

no information

## 14. TRANSPORT INFORMATION

### Name and description

PAINT

### 14.1. Transport of Dangerous Goods by Road/Rail(ADR/RID):

UN number: 1263

Class: 3

Packing group: III



# SAFETY DATA SHEET according to Regulation 1907/2006

Product name: **MCU-ALUTOPCOAT**

Creation date: **3.10.2011**

Revision: : **6.11.2012**

Version: **1**

...continued from previous page

Limited quantities: 5 L

Tunnel restriction code: D/E



## 14.2. Transport of Dangerous Goods by River (ADN):

UN number: 1263

Class: 3

Packing group: III

## 14.3. Transport of Dangerous Goods by Sea (IMDG):

UN number: 1263

Class: 3

Packing group: III

Marine pollutant: NO

## 14.4. Transport of Dangerous Goods by Air (ICAO/IATA):

UN number: 1263

Class: 3

Packing group: III

## 15. REGULATORY INFORMATION

### 15.1. Information on laws

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
- Dangerous preparations directive (99/45/EC) as amended
- Dangerous substances directive (67/548/EEC) as amended

### 15.2. Chemical safety assessment

Chemical safety assessment is not available.

### 15.3. Special instructions:

no information

### 15.4. VOC value according to Directive 2004/42/EC

EU tolerance levels and category: A(i) 500 g/l. VOC Content: 220 g/l

Product name: **MCU-ALUTOPCOAT**Creation date: **3.10.2011**Revision: : **6.11.2012**Version: **1**

...continued from previous page

## 16. OTHER INFORMATION

### 16.1. List of relevant R phrases

- (R10) Flammable.
- (R11) Highly flammable.
- (R14) Reacts violently with water.
- (R15) Contact with water liberates extremely flammable gases.
- (R20) Harmful by inhalation.
- (R20/21) Harmful by inhalation and in contact with skin.
- (R36/37) Irritating to eyes and respiratory system.
- (R36/37/38) Irritating to eyes, respiratory system and skin.
- (R36/38) Irritating to eyes and skin.
- (R37) Irritating to respiratory system.
- (R38) Irritating to skin.
- (R40) Limited evidence of a carcinogenic effect.
- (R42) May cause sensitisation by inhalation.
- (R42/43) May cause sensitisation by inhalation and skin contact.
- (R48/20) Harmful: danger of serious damage to health by prolonged exposure through inhalation.
- (R51/53) Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- (R65) Harmful: may cause lung damage if swallowed.
- (R66) Repeated exposure may cause skin dryness or cracking.

### 16.2. List of relevant H phrases

- (H224) Extremely flammable liquid and vapour.
- (H226) Flammable liquid and vapour.
- (H228) Flammable solid.
- (H261) In contact with water releases flammable gases.
- (H304) May be fatal if swallowed and enters airways.
- (H312) Harmful in contact with skin.
- (H315) Causes skin irritation.
- (H317) May cause an allergic skin reaction.
- (H319) Causes serious eye irritation.
- (H332) Harmful if inhaled.
- (H334) May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- (H335) May cause respiratory irritation.
- (H351) Suspected of causing cancer .
- (H373) May cause damage to organs through prolonged or repeated exposure .
- (H411) Toxic to aquatic life with long lasting effects.
- (EUH014) Reacts violently with water.
- (EUH066) Repeated exposure may cause skin dryness or cracking.

### 16.3. Sources of key data used to compile the data sheet:

### 16.4. Modifications of the safety data sheet:

The information of this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.

# **SAFETY DATA SHEET** according to Regulation 1907/2006

Product name: **MCU-ALUTOPCOAT**

...continued from previous page

Creation date: **3.10.2011**

Revision: : **6.11.2012**

Version: **1**

---