

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 7.0

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GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

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

### 1.1 Product identifiers

Product name : Di-*n*-butylmagnesium solution

Product Number : 345113

Brand : Aldrich

REACH No. : This product is a mixture. REACH Registration Number see section 3.

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

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3

### 1.4 Emergency telephone

Emergency Phone # : 000 800 1007 141 (CHEMTREC)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

|                                                                                        |                                                                                      |
|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Flammable liquids, (Category 2)                                                        | H225: Highly flammable liquid and vapor.                                             |
| Pyrophoric liquids, (Category 1)                                                       | H250: Catches fire spontaneously if exposed to air.                                  |
| Substances and mixtures which in contact with water emit flammable gases, (Category 1) | H260: In contact with water releases flammable gases which may ignite spontaneously. |
| Skin corrosion, (Sub-category 1B)                                                      | H314: Causes severe skin burns and eye damage.                                       |
| Serious eye damage, (Category 1)                                                       | H318: Causes serious eye damage.                                                     |

|                                                                                        |                                                             |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------|
| Specific target organ toxicity - single exposure, (Category 3), Central nervous system | H336: May cause drowsiness or dizziness.                    |
| Aspiration hazard, (Category 1)                                                        | H304: May be fatal if swallowed and enters airways.         |
| Short-term (acute) aquatic hazard, (Category 1)                                        | H400: Very toxic to aquatic life.                           |
| Long-term (chronic) aquatic hazard, (Category 1)                                       | H410: Very toxic to aquatic life with long lasting effects. |

## 2.2 Label elements

### Labelling according Regulation (EC) No 1272/2008

#### Pictogram

|                                      |                                                                                                                                  |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Signal Word                          | Danger                                                                                                                           |
| Hazard Statements                    |                                                                                                                                  |
| H225                                 | Highly flammable liquid and vapor.                                                                                               |
| H250                                 | Catches fire spontaneously if exposed to air.                                                                                    |
| H260                                 | In contact with water releases flammable gases which may ignite spontaneously.                                                   |
| H304                                 | May be fatal if swallowed and enters airways.                                                                                    |
| H314                                 | Causes severe skin burns and eye damage.                                                                                         |
| H336                                 | May cause drowsiness or dizziness.                                                                                               |
| H410                                 | Very toxic to aquatic life with long lasting effects.                                                                            |
| Precautionary Statements             |                                                                                                                                  |
| P210                                 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.                                   |
| P231 + P232                          | Handle and store contents under inert gas. Protect from moisture.                                                                |
| P280                                 | Wear protective gloves/ protective clothing/ eye protection/ face protection.                                                    |
| P301 + P330 + P331                   | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.                                                                               |
| P303 + P361 + P353                   | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.                                     |
| P304 + P340 + P310                   | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.             |
| P305 + P351 + P338                   | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P370 + P378                          | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.                                             |
| Supplemental Hazard information (EU) |                                                                                                                                  |
| EUH014                               | Reacts violently with water.                                                                                                     |

### Reduced Labeling (<= 125 ml)

#### Pictogram

|                                      |                                                                                                                                  |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Signal Word                          | Danger                                                                                                                           |
| Hazard Statements                    |                                                                                                                                  |
| H250                                 | Catches fire spontaneously if exposed to air.                                                                                    |
| H304                                 | May be fatal if swallowed and enters airways.                                                                                    |
| H314                                 | Causes severe skin burns and eye damage.                                                                                         |
| Precautionary Statements             |                                                                                                                                  |
| P280                                 | Wear protective gloves/ protective clothing/ eye protection/ face protection.                                                    |
| P301 + P330 + P331                   | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.                                                                               |
| P303 + P361 + P353                   | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.                                     |
| P304 + P340 + P310                   | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.             |
| P305 + P351 + P338                   | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P370 + P378                          | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.                                             |
| Supplemental Hazard information (EU) |                                                                                                                                  |
| EUH014                               | Reacts violently with water.                                                                                                     |

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Formula :  $C_8H_{18}Mg$   
Molecular weight : 138,53 g/mol

| Component           |                       | Classification                                                                                                                                                                                                                        | Concentration  |
|---------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| <b>n-heptane</b>    |                       |                                                                                                                                                                                                                                       |                |
| CAS-No.             | 142-82-5              | Flam. Liq. 2; Skin Irrit. 2; STOT SE 3; Asp. Tox. 1; Aquatic Acute 1; Aquatic Chronic 1; H225, H315, H336, H304, H400, H410<br>Concentration limits:<br>20 %: STOT SE 3, H336;<br>M-Factor - Aquatic Acute:<br>1 - Aquatic Chronic: 1 | >= 70 - < 90 % |
| EC-No.              | 205-563-8             |                                                                                                                                                                                                                                       |                |
| Index-No.           | 601-008-00-2          |                                                                                                                                                                                                                                       |                |
| Registration number | 01-2119457603-38-XXXX |                                                                                                                                                                                                                                       |                |
|                     |                       |                                                                                                                                                                                                                                       |                |

|                         |              |                                                                                                            |                   |
|-------------------------|--------------|------------------------------------------------------------------------------------------------------------|-------------------|
| <b>Dibutylmagnesium</b> |              |                                                                                                            |                   |
| CAS-No.                 | 1191-47-5    | Pyr. Liq. 1; Water-react 1;<br>Skin Corr. 1B; Eye Dam.<br>1; H250, H260, H314,<br>H318                     | >= 20 - < 30<br>% |
| EC-No.                  | 214-736-7    |                                                                                                            |                   |
|                         | *            |                                                                                                            |                   |
| <b>Triethylaluminum</b> |              |                                                                                                            |                   |
| CAS-No.                 | 97-93-8      | Pyr. Liq. 1; Self-heat. 2;<br>Water-react 1; Skin Corr.<br>1A; Eye Dam. 1; H250,<br>H252, H260, H314, H318 | >= 1 - < 3 %      |
| EC-No.                  | 202-619-3    |                                                                                                            |                   |
| Index-No.               | 013-004-00-2 |                                                                                                            |                   |
|                         | *            |                                                                                                            |                   |

\*A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, or the annual tonnage does not require a registration.

For the full text of the H-Statements mentioned in this Section, see Section 16.

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## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

#### General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

#### If inhaled

After inhalation: fresh air. Call in physician.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

#### If swallowed

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Pulmonary failure possible after aspiration of vomit. Call a physician immediately. Do not attempt to neutralise.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Carbon dioxide (CO<sub>2</sub>) Dry powder

#### Unsuitable extinguishing media

Water Foam

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

Carbon oxides

Magnesium oxide

Aluminum oxide

Combustible.

Pay attention to flashback.

Vapors are heavier than air and may spread along floors.

May not get in touch with: Water

Development of hazardous combustion gases or vapours possible in the event of fire.

Forms explosive mixtures with air at ambient temperatures.

## **5.3 Advice for firefighters**

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

## **5.4 Further information**

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

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## **SECTION 6: Accidental release measures**

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

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

### **6.2 Environmental precautions**

Do not let product enter drains. Risk of explosion.

### **6.3 Methods and materials for containment and cleaning up**

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

### **6.4 Reference to other sections**

For disposal see section 13.

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## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

#### **Advice on safe handling**

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols. Keep workplace dry. Do not allow product to come into contact with water.

#### **Advice on protection against fire and explosion**

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

#### **Hygiene measures**

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

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

#### **Storage conditions**

Tightly closed. Keep away from heat and sources of ignition.

Never allow product to get in contact with water during storage.

Handle and store under inert gas. Air and moisture sensitive.

**Storage class**

Storage class (TRGS 510): 4.2: Pyrophoric and self-heating hazardous materials

**7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

**Ingredients with workplace control parameters**

**8.2 Exposure controls**

**Personal protective equipment**

**Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,4 mm

Break through time: 480 min

Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,2 mm

Break through time: 30 min

Material tested: Dermatril® P (KCL 743 / Aldrich Z677388, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**

Flame retardant antistatic protective clothing.

**Respiratory protection**

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type ABEK

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

**Control of environmental exposure**

Do not let product enter drains. Risk of explosion.

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

- |                                                 |                                                                                  |
|-------------------------------------------------|----------------------------------------------------------------------------------|
| a) Physical state                               | liquid                                                                           |
| b) Color                                        | No data available                                                                |
| c) Odor                                         | No data available                                                                |
| d) Melting point/freezing point                 | No data available                                                                |
| e) Initial boiling point and boiling range      | 98 °C - lit.                                                                     |
| f) Flammability (solid, gas)                    | No data available                                                                |
| g) Upper/lower flammability or explosive limits | No data available                                                                |
| h) Flash point                                  | -6 °C - closed cup                                                               |
| i) Autoignition temperature                     | No data available                                                                |
| j) Decomposition temperature                    | No data available                                                                |
| k) pH                                           | No data available                                                                |
| l) Viscosity                                    | Viscosity, kinematic: No data available<br>Viscosity, dynamic: No data available |
| m) Water solubility                             | No data available                                                                |
| n) Partition coefficient: n-octanol/water       | No data available                                                                |
| o) Vapor pressure                               | No data available                                                                |
| p) Density                                      | 0,713 g/cm <sup>3</sup>                                                          |
| Relative density                                | No data available                                                                |
| q) Relative vapor density                       | No data available                                                                |
| r) Particle                                     | No data available                                                                |

characteristics

- s) Explosive properties Not classified as explosive.
- t) Oxidizing properties none

## **9.2 Other safety information**

No data available

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## **SECTION 10: Stability and reactivity**

### **10.1 Reactivity**

Vapors may form explosive mixture with air.

### **10.2 Chemical stability**

Sensitive to air. sensitive to moisture

### **10.3 Possibility of hazardous reactions**

No data available

### **10.4 Conditions to avoid**

Exposure to air.  
Warming.  
Moisture.

### **10.5 Incompatible materials**

Bases, Oxidizing agents, Strong oxidizing agents, Oxygen, Alcohols, acids

### **10.6 Hazardous decomposition products**

In the event of fire: see section 5

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## **SECTION 11: Toxicological information**

### **11.1 Information on toxicological effects**

#### **Mixture**

#### **Acute toxicity**

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract

Dermal: No data available

#### **Skin corrosion/irritation**

Remarks: Mixture causes burns.

#### **Serious eye damage/eye irritation**

Remarks: Mixture causes serious eye damage.

Risk of blindness!

#### **Respiratory or skin sensitization**

No data available

#### **Germ cell mutagenicity**

No data available

#### **Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

Mixture may cause drowsiness or dizziness.

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

Aspiration hazard, Aspiration may cause pulmonary edema and pneumonitis.

**11.2 Additional Information****Endocrine disrupting properties****Product:**

Assessment

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea  
Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

**Components****n-heptane****Acute toxicity**

LD50 Oral - Rat - male and female - > 5.000 mg/kg  
(OECD Test Guideline 401)

Remarks: The value is given in analogy to the following substances: isooctane  
LC50 Inhalation - Rat - male and female - 4 h - > 29,29 mg/l - vapor  
(OECD Test Guideline 403)

LD50 Dermal - Rabbit - male and female - > 2.000 mg/kg  
(OECD Test Guideline 402)

Remarks: The value is given in analogy to the following substances: isooctane

**Skin corrosion/irritation**

Skin - Rabbit

Result: Irritating to skin. - 24 h  
(OECD Test Guideline 404)

Remarks: The value is given in analogy to the following substances: isooctane

Remarks: Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

**Serious eye damage/eye irritation**

Eyes - Rabbit

Result: No eye irritation  
(OECD Test Guideline 405)

Remarks: The value is given in analogy to the following substances: isooctane

**Respiratory or skin sensitization**

Maximization Test - Guinea pig

Result: negative

(OECD Test Guideline 406)

Remarks: **Germ cell mutagenicity**

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium

Result: negative

Test Type: Chromosome aberration test in vitro

Test system: rat hepatocytes

Result: negative

**Carcinogenicity**

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

May cause drowsiness or dizziness.

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

May be fatal if swallowed and enters airways. Aspiration hazard, Aspiration may cause pulmonary edema and pneumonitis.

**Dibutylmagnesium****Acute toxicity**

Oral: No data available

Inhalation: No data available

Dermal: No data available

**Skin corrosion/irritation**

Remarks: No data available

**Serious eye damage/eye irritation**

Remarks: No data available

**Respiratory or skin sensitization**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Triethylaluminum****Acute toxicity**

LD50 Oral - Rat - female - > 2.000 mg/kg

(OECD Test Guideline 423)

Inhalation: No data available

Dermal: No data available

**Skin corrosion/irritation**

Remarks: Causes severe burns.

(ECHA)

**Serious eye damage/eye irritation**

Remarks: Causes serious eye damage.

**Respiratory or skin sensitization**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

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

No data available

**12.2 Persistence and degradability**

No data available

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6 Endocrine disrupting properties****Product:**

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## 12.7 Other adverse effects

No data available

### Components

#### n-heptane

|                                                     |                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Toxicity to fish                                    | LL50 - Rainbow darter ( <i>Etheostoma caeruleum</i> ) - > 13,4 mg/l - 96 h<br>(OECD Test Guideline 203)<br>Remarks: (ECHA)                                                                                                                                         |
| Toxicity to daphnia and other aquatic invertebrates | static test EC50 - <i>Daphnia magna</i> (Water flea) - 0,23 mg/l - 21 d<br>Remarks: (ECHA)<br>(in analogy to similar products)                                                                                                                                     |
| Toxicity to algae                                   | EL50 - <i>Pseudokirchneriella subcapitata</i> (green algae) - 29 mg/l - 72 h<br>(OECD Test Guideline 201)<br>Remarks: (ECHA)<br><br>NOELR - <i>Pseudokirchneriella subcapitata</i> (green algae) - 6,3 mg/l - 72 h<br>(OECD Test Guideline 201)<br>Remarks: (ECHA) |

#### Dibutylmagnesium

No data available

#### Triethylaluminum

No data available

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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

No data available

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**SECTION 14: Transport information****14.1 UN number**

ADR/RID: 3399

IMDG: 3399

IATA: 3399

**14.2 UN proper shipping name**

ADR/RID: ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE (n-heptane, Triethylaluminum, Dibutylmagnesium)

IMDG: ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE (Triethylaluminum, Dibutylmagnesium, n-heptane)

IATA: Organometallic substance, liquid, water-reactive, flammable (Triethylaluminum, Dibutylmagnesium, n-heptane)

Passenger Aircraft: Not permitted for transport

**14.3 Transport hazard class(es)**

ADR/RID: 4.3 (3)

IMDG: 4.3 (3)

IATA: 4.3 (3)

**14.4 Packaging group**

ADR/RID: I

IMDG: I

IATA: I

**14.5 Environmental hazards**

ADR/RID: yes

IMDG Marine pollutant: yes

IATA: no

**14.6 Special precautions for user**

Tunnel restriction code : (B/E)

Further information : No data available

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

**National legislation**

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

P7 PYROPHORIC LIQUIDS AND SOLIDS

E1 ENVIRONMENTAL HAZARDS

O1 OTHER HAZARDS

O2 OTHER HAZARDS

**Other regulations**

Take note of Dir 94/33/EC on the protection of young people at work.

**15.2 Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

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**SECTION 16: Other information****Full text of H-Statements**

H225

Highly flammable liquid and vapor.

|        |                                                                                |
|--------|--------------------------------------------------------------------------------|
| H250   | Catches fire spontaneously if exposed to air.                                  |
| H252   | Self-heating in large quantities; may catch fire.                              |
| H260   | In contact with water releases flammable gases which may ignite spontaneously. |
| H304   | May be fatal if swallowed and enters airways.                                  |
| H314   | Causes severe skin burns and eye damage.                                       |
| H315   | Causes skin irritation.                                                        |
| H318   | Causes serious eye damage.                                                     |
| H336   | May cause drowsiness or dizziness.                                             |
| H400   | Very toxic to aquatic life.                                                    |
| H410   | Very toxic to aquatic life with long lasting effects.                          |
| EUH014 | Reacts violently with water.                                                   |

### Relevant changes since previous version

#### 5. Fire-fighting measures

### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; 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; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

### Classification of the mixture

|             |      |
|-------------|------|
| Flam. Liq.2 | H225 |
| Pyr. Liq.1  | H250 |

### Classification procedure:

Based on product data or assessment  
Calculation method

|                  |      |                    |
|------------------|------|--------------------|
| Water-react1     | H260 | Calculation method |
| Skin Corr.1B     | H314 | Calculation method |
| Eye Dam.1        | H318 | Calculation method |
| STOT SE3         | H336 | Calculation method |
| Asp. Tox.1       | H304 | Calculation method |
| Aquatic Acute1   | H400 | Calculation method |
| Aquatic Chronic1 | H410 | Calculation method |

#### **Further information**

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