

## STANDART Lac NAT Aluminium Powder

Version 3.0      Revision Date: 18.04.2016      SDS Number: 102000000281      Print Date: 19.11.2018  
Date of first issue: 02.01.2014

---

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

#### 1.1 Product identifier

Trade name : STANDART Lac NAT Aluminium Powder  
Material number : 040010D70

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

This information is not available.

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

Company : ECKART GmbH  
Guentersthal 4  
91235 Hartenstein  
  
Telephone : +499152770  
  
Telefax : +499152777008  
  
E-mail address of person responsible for the SDS : msds.eckart@altana.com

#### 1.4 Emergency telephone number

GBK Gefahrgut Büro GmbH, Ingelheim, Germany:  
From outside US: : (001) 352-323-3500  
(First call in English, response in your language is possible)  
US & Canada (toll free) : 1-800-5355-053

---

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Flammable solids, Category 1      H228: Flammable solid.

##### Classification (67/548/EEC, 1999/45/EC)

Highly flammable      R11: Highly flammable.

**Information concerning particular hazards for human and environment:** : Please refer to our website for further important safety instructions for handling aluminium powder:


[http://www.eckart.net/fileadmin/eckart/Service/GDA\\_Alupulver\\_Safety\\_engl.pdf](http://www.eckart.net/fileadmin/eckart/Service/GDA_Alupulver_Safety_engl.pdf)

## STANDART Lac NAT Aluminium Powder

Version 3.0      Revision Date: 18.04.2016      SDS Number: 102000000281      Print Date: 19.11.2018  
Date of first issue: 02.01.2014

### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms : 

Signal word : Danger

Hazard statements : H228      Flammable solid.

Precautionary statements : **Prevention:**

|      |   |
|------|---|
| P210 | Keep away from heat/sparks/open flames/hot surfaces. No smoking.  |
| P240 | Ground/bond container and receiving equipment.                    |
| P241 | Use explosion-proof electrical/ ventilating/ lighting/ equipment. |
| P280 | Wear protective gloves/ eye protection/ face protection.          |

**Response:**

|             |  |
|-------------|--|
| P370 + P378 | In case of fire: Use for extinction: Special powder for metal fires. |
| P370 + P378 | In case of fire: Use for extinction: Dry sand.                       |

### 2.3 Other hazards

No information available.  
No information available.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Substance name : aluminium powder (stabilised)

Substance No. : EINECS-No. : 231-072-3

#### Hazardous components

| Chemical name                 | CAS-No.<br>EC-No.<br>Registration number   | Concentration (% w/w) |
|-------------------------------|--|-----------------------|
| aluminium powder (stabilised) | 7429-90-5<br>231-072-3<br>01-2119529243-45 | >= 50 - <= 100        |

## STANDART Lac NAT Aluminium Powder

Version 3.0      Revision Date: 18.04.2016      SDS Number: 102000000281      Print Date: 19.11.2018  
Date of first issue: 02.01.2014

---

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

- General advice : Move the victim to fresh air.  
Move out of dangerous area.
- If inhaled : If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : Wash off immediately with soap and plenty of water.  
If on skin, rinse well with water.  
If on clothes, remove clothes.
- In case of eye contact : Flush eyes with water as a precaution.  
Remove contact lenses.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.

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

- Symptoms : No information available.
- Risks : No information available.

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

- Treatment : No information available.
- 

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

- Suitable extinguishing media : Dry sand  
Special powder against metal fire
- Unsuitable extinguishing media : ABC powder  
Carbon dioxide (CO<sub>2</sub>)  
Water  
Foam

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

- Specific hazards during fire-fighting : Contact with water liberates extremely flammable gas (hydrogen).
-

## STANDART Lac NAT Aluminium Powder

Version 3.0      Revision Date: 18.04.2016      SDS Number: 102000000281      Print Date: 19.11.2018  
Date of first issue: 02.01.2014

---

### 5.3 Advice for firefighters

- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.
- Further information : Standard procedure for chemical fires.  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- 

## SECTION 6: Accidental release measures

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

- Personal precautions : Use personal protective equipment.  
Evacuate personnel to safe areas.  
Avoid dust formation.  
Remove all sources of ignition.

### 6.2 Environmental precautions

- Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.

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

- Methods for cleaning up : Use mechanical handling equipment.  
Do not use a vacuum cleaner.
- Do not flush with water.  
Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

- For personal protection see section 8.
- 

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

- Advice on safe handling : Avoid creating dust.  
Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.  
Store away from heat.
- For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Dispose of rinse water in accordance with local and national regulations.
- Advice on protection against : Use explosion-proof equipment. During processing, dust may
-

## STANDART Lac NAT Aluminium Powder

Version 3.0      Revision Date: 18.04.2016      SDS Number: 102000000281      Print Date: 19.11.2018  
Date of first issue: 02.01.2014

fire and explosion      form explosive mixture in air. Take measures to prevent the build up of electrostatic charge. When transferring from one container to another apply earthing measures and use conductive hose material.

Keep away from open flames, hot surfaces and sources of ignition.

Hygiene measures      : Wash hands before breaks and at the end of workday.

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

Requirements for storage areas and containers      : Earthing of containers and apparatuses is essential. Reaction with water liberates extremely flammable gas (hydrogen) Use explosion-proof equipment. Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Keep away from sources of ignition - No smoking. Keep container closed when not in use.

No smoking. Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.

Further information on storage conditions      : Protect from humidity and water.

Advice on common storage      : Do not store together with oxidizing and self-igniting products. Never allow product to get in contact with water during storage. Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Storage class (TRGS 510)      : 4.1B, Flammable solid hazardous materials

Other data      : Keep in a dry place. No decomposition if stored and applied as directed.

### 7.3 Specific end use(s)

This information is not available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits

| Components                    | CAS-No.   | Value type (Form of exposure) | Control parameters   | Basis (Version Date) |
|-------------------------------|---|-------------------------------|----------------------|----------------------|
| aluminium powder (stabilised) | 7429-90-5   | TWA (Inhalable)               | 10 mg/m <sup>3</sup> | GB EH40 (2011-12-01) |
| Further information           | The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m <sup>-3</sup> 8-hour TWA of inhalable dust or 4 mg.m <sup>-3</sup> 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are ex- |                               |                      |                      |

## STANDART Lac NAT Aluminium Powder

Version 3.0      Revision Date: 18.04.2016      SDS Number: 102000000281      Print Date: 19.11.2018  
Date of first issue: 02.01.2014

|                               |   |                  |                      |                      |
|-------------------------------|---|------------------|----------------------|----------------------|
|                               | posed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used  |                  |                      |                      |
| aluminium powder (stabilised) | 7429-90-5   | TWA (Respirable) | 4 mg/m <sup>3</sup>  | GB EH40 (2011-12-01) |
| Further information           | The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m <sup>-3</sup> 8-hour TWA of inhalable dust or 4 mg.m <sup>-3</sup> 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used  |                  |                      |                      |
| aluminium powder (stabilised) | 7429-90-5   | TWA (Inhalable)  | 10 mg/m <sup>3</sup> | GB EH40 (2005-04-06) |
| Further information           | For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m <sup>-3</sup> 8-hour TWA of inhalable dust or 4 mg.m <sup>-3</sup> 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used |                  |                      |                      |
| aluminium powder (stabilised) | 7429-90-5   | TWA (Respirable) | 4 mg/m <sup>3</sup>  | GB EH40 (2005-04-06) |
| Further information           | For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m <sup>-3</sup> 8-hour TWA of inhalable dust or 4 mg.m <sup>-3</sup> 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'.  |                  |                      |                      |

## STANDART Lac NAT Aluminium Powder

Version 3.0      Revision Date: 18.04.2016      SDS Number: 102000000281      Print Date: 19.11.2018  
Date of first issue: 02.01.2014

|                               |   |                       |                      |                      |
|-------------------------------|---|-----------------------|----------------------|----------------------|
|                               | ble' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used   |                       |                      |                      |
| aluminium powder (stabilised) | 7429-90-5   | TWA (inhalable dust)  | 10 mg/m <sup>3</sup> | GB EH40 (2011-12-01) |
| Further information           | For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m <sup>-3</sup> 8-hour TWA of inhalable dust or 4 mg.m <sup>-3</sup> 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used |                       |                      |                      |
| aluminium powder (stabilised) | 7429-90-5   | TWA (Respirable dust) | 4 mg/m <sup>3</sup>  | GB EH40 (2011-12-01) |
| Further information           | For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m <sup>-3</sup> 8-hour TWA of inhalable dust or 4 mg.m <sup>-3</sup> 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3., Where dusts contain components that have their own assigned WEL, all the relevant limits   |                       |                      |                      |



## STANDART Lac NAT Aluminium Powder

Version 3.0      Revision Date: 18.04.2016      SDS Number: 102000000281      Print Date: 19.11.2018  
Date of first issue: 02.01.2014

|  |   |
|--|---|
|  | should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used |
|--|---|

### 8.2 Exposure controls

#### Personal protective equipment

- Eye protection : Face-shield  
Safety glasses
- Hand protection  
Material : Leather  
Glove length : Long sleeve gloves
- Remarks : Leather gloves The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.  
The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Skin and body protection : Anti-static and fire resistant protective clothing. DIN EN 11612; EN 533; EN 1149-1. Anti-static safety shoes.  
Dust impervious protective suit  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Respiratory protection : Use suitable breathing protection if workplace concentration requires.  
Breathing apparatus with filter.  
P1 filter

#### Environmental exposure controls

- Water : The product should not be allowed to enter drains, water courses or the soil.

---

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- Appearance : powder  
Colour : silver  
Odour : odourless  
Odour Threshold : No data available  
pH : No data available  
Melting point/freezing point : 660 °C
- Boiling point/boiling range : 2,467 °C
- Flash point : No data available  
Evaporation rate : No data available  
Flammability (solid, gas) : The substance or mixture is a flammable solid with the category 1.



## STANDART Lac NAT Aluminium Powder

Version 3.0      Revision Date: 18.04.2016      SDS Number: 102000000281      Print Date: 19.11.2018  
Date of first issue: 02.01.2014

---

Auto-flammability : No data available  
Upper explosion limit : No data available  
Lower explosion limit : 30 g/m<sup>3</sup>

Vapour pressure : No data available  
Relative vapour density : No data available  
Relative density : No data available  
Density : 2.5 g/cm<sup>3</sup>

Bulk density : No data available  
Water solubility : No data available  
Solubility in other solvents : No data available  
Partition coefficient: n-octanol/water : No data available  
Ignition temperature : 340 °C

Decomposition temperature : No data available  
Viscosity, dynamic : No data available  
Viscosity, kinematic : No data available  
Flow time : No data available  
Explosive properties : No data available  
Oxidizing properties : No data available

### 9.2 Other information

No data available

---

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No decomposition if stored and applied as directed.

### 10.2 Chemical stability

No decomposition if stored and applied as directed.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : Contact with acids and alkalis may release hydrogen.

Stable under recommended storage conditions.

Dust may form explosive mixture in air.

### 10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

### 10.5 Incompatible materials

Materials to avoid : Acids  
Bases  
Oxidizing agents  
Water

### 10.6 Hazardous decomposition products

## STANDART Lac NAT Aluminium Powder

Version 3.0      Revision Date: 18.04.2016      SDS Number: 102000000281      Print Date: 19.11.2018  
Date of first issue: 02.01.2014

---

Contact with water or humid air : This information is not available.

Thermal decomposition : This information is not available.

---

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

##### Acute toxicity

###### Product:

Acute inhalation toxicity : LC50 (Rat): > 888 mg/l  
Exposure time: 4 h

###### Components:

###### 7429-90-5:

Acute inhalation toxicity : LC50 (Rat): > 5 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist

##### Further information

###### Product:

Remarks: No data available

---

### SECTION 12: Ecological information

#### 12.1 Toxicity

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

Not relevant

#### 12.6 Other adverse effects

###### Product:

Additional ecological information : Remarks: No data available

---

## STANDART Lac NAT Aluminium Powder

Version 3.0      Revision Date: 18.04.2016      SDS Number: 102000000281      Print Date: 19.11.2018  
Date of first issue: 02.01.2014

---

### SECTION 13: Disposal considerations

European Waste Catalogue : 12 01 04 - non-ferrous metal dust and particles

#### 13.1 Waste treatment methods

Product : Do not dispose of waste into sewer.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Send to a licensed waste management company.  
In accordance with local and national regulations.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.  
Do not burn, or use a cutting torch on, the empty drum.  
In accordance with local and national regulations.

---

### SECTION 14: Transport information

#### 14.1 UN number

ADR : UN 1309  
IMDG : UN 1309  
IATA : UN 1309

#### 14.2 UN proper shipping name

ADR : ALUMINIUM POWDER, COATED  
IMDG : ALUMINIUM POWDER, COATED  
IATA : Aluminium powder, coated

#### 14.3 Transport hazard class(es)

ADR : 4.1  
IMDG : 4.1  
IATA : 4.1

#### 14.4 Packing group

ADR  
Packing group : II  
Classification Code : F3  
Hazard Identification Number : 40  
Labels : 4.1  
Tunnel restriction code : (E)

IMDG  
Packing group : II  
Labels : 4.1  
EmS Number : F-G,S-G

---

## STANDART Lac NAT Aluminium Powder

|         |                |              |                                 |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number:  | Print Date: 19.11.2018          |
| 3.0     | 18.04.2016     | 102000000281 | Date of first issue: 02.01.2014 |

---

### IATA

|  |   |  |
|--|---|--|
| Packing instruction (cargo aircraft)     | : | 448  |
| Packing instruction (passenger aircraft) | : | 445  |
| Packing instruction (LQ)                 | : | Y441   |
| Packing group                            | : | II   |
| Labels                                   | : | Flammable Solid                                  |
| Remarks                                  | : | IMDG Code segregation group 15 - Powdered metals |

### 14.5 Environmental hazards

#### ADR

Environmentally hazardous : no

#### IMDG

Marine pollutant : no

### 14.6 Special precautions for user

Not applicable

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

---

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

### 15.2 Chemical safety assessment

This information is not available.

---

## SECTION 16: Other information

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; 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

## STANDART Lac NAT Aluminium Powder

|         |                |              |                                 |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number:  | Print Date: 19.11.2018          |
| 3.0     | 18.04.2016     | 102000000281 | Date of first issue: 02.01.2014 |

---

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; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

### Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GB / EN