SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

UNIPAK LED 485 877 Litho Ink

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

1.1 Product identifier
Trade name : UNIPAK LED 485 877 Litho Ink
Product code: 023642N20 023642N20

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)
Skin irritation, Category 2  H315: Causes skin irritation.
Eye irritation, Category 2  H319: Causes serious eye irritation.
Skin sensitisation, Category 1  H317: May cause an allergic skin reaction.
Chronic aquatic toxicity, Category 3  H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements
Labelling (REGULATION (EC) No 1272/2008)
Hazard pictograms : ![Hazard Pictogram]

Signal word : Warning

Hazard statements : 
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : 
**Prevention:**
- P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/ eye protection/ face protection.

**Response:**
- P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
- P337 + P313 If eye irritation persists: Get medical advice/ attention.
- P362 + P364 Take off contaminated clothing and wash it before reuse.

Hazardous components which must be listed on the label:
- 4,4’-Isopropylidenediphenol, ethoxylated, esters with acrylic acid and isononanoic acid
- Glycerol, propoxylated, esters with acrylic acid

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.

**SECTION 3: Composition/information on ingredients**

3.2 Mixtures

**Hazardous components**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Index-No.</th>
<th>Classification REGULATION (EC) No 1272/2008</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,4’-Isopropylidenediphenol, ethoxylated, esters with acrylic acid and isononanoic acid</td>
<td>Not Assigned 919-846-5 01-2120087346-49</td>
<td></td>
<td></td>
<td>Skin Sens. 1B; H317 Aquatic Chronic 2; H411</td>
<td>&gt;= 20 - &lt; 25</td>
</tr>
<tr>
<td>aluminium powder (stabilised)</td>
<td>7429-90-5 231-072-3 013-002-00-1 01-2119529243-45</td>
<td></td>
<td>Flam. Sol. 1; H228</td>
<td></td>
<td>&gt;= 1 - &lt; 10</td>
</tr>
</tbody>
</table>
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Version 1.2  Revision Date: 03.05.2018  SDS Number: 102000029052  Print Date: 19.11.2018  Date of first issue: 02.02.2018

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<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Technical Name</th>
<th>Aquatic Chronic</th>
<th>Aquatic Acute</th>
</tr>
</thead>
<tbody>
<tr>
<td>6846-50-0</td>
<td>1-isopropyl-2,2-dimethyltrimethylene diisobutyrate</td>
<td>1; H412 &gt;= 2.5 - &lt; 10</td>
<td>1; H400 Aquatic Acute 1; H410 Aquatic Chronic 1; H412 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 &gt;= 0.1 - &lt; 0.25</td>
</tr>
<tr>
<td>229-934-9</td>
<td>Glycerol, propoxylated, esters with acrylic acid</td>
<td>2; H319 Eye Irrit. 2; H317 Skin Sens. 1; H317 &gt;= 1 - &lt; 10</td>
<td>2; H319 Eye Irrit. 2; H317 Skin Sens. 1; H317 &gt;= 1 - &lt; 3</td>
</tr>
<tr>
<td>01-2119451093-47</td>
<td>dodecylphosphonic acid</td>
<td>1B; H314 Skin Corr. 1; H318 Eye Dam. 1; H318 &gt;= 0.1 - &lt; 0.25</td>
<td></td>
</tr>
<tr>
<td>52408-84-1</td>
<td>500-114-5</td>
<td>1; H317</td>
<td></td>
</tr>
<tr>
<td>01-2119487948-12</td>
<td>5137-70-2</td>
<td>525-897-8</td>
<td></td>
</tr>
<tr>
<td>Not Assigned</td>
<td>Stabilizer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Move the victim to fresh air.
Do not leave the victim unattended.
Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.

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 skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.

In case of eye contact : Immediately flush eye(s) with plenty of water.
Immediately flush eye(s) with plenty of water.
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

Risks : Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
4.3 Indication of any immediate medical attention and special treatment needed
This information is not available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:
- Dry sand
- ABC powder
- Foam

Unsuitable extinguishing media:
- High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting:
- Do not allow run-off from fire fighting to enter drains or water courses.

5.3 Advice for firefighters

Special protective equipment for firefighters:
- Wear self-contained breathing apparatus for firefighting if necessary.

Further information:
- Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions:
- Evacuate personnel to safe areas.
- Use personal protective equipment.

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.
- Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

- Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
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: Do not breathe vapours/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
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.
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Advice on protection against fire and explosion: Normal measures for preventive fire protection.

Hygiene measures: When using do not eat or drink. When using do not smoke. 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) Take measures to prevent the build up of electrostatic charge. 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.

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. 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 near acids.
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.

Further information on storage stability : 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

<table>
<thead>
<tr>
<th>Occupational Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
</tr>
<tr>
<td>aluminium powder (stabilised)</td>
</tr>
</tbody>
</table>

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⁻³ 8-hour TWA of inhalable dust or 4 mg.m⁻³ 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.

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<thead>
<tr>
<th></th>
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<th>GB EH40 (2011-12-01)</th>
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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.

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<table>
<thead>
<tr>
<th>Substance name</th>
<th>End Use</th>
<th>Exposure routes</th>
<th>Potential health effects</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>aluminium powder (stabilised)</td>
<td>Workers</td>
<td>Inhalation</td>
<td>long term – local effects</td>
<td>3.72 mg/m³</td>
</tr>
<tr>
<td>Consumers</td>
<td>Oral</td>
<td></td>
<td>long term – systemic effects</td>
<td>3.95 mg/kg</td>
</tr>
<tr>
<td>1-isopropyl-2,2-dimethyltrimethylene diisobutyrate</td>
<td>Workers</td>
<td>Skin contact</td>
<td>long term – systemic effects</td>
<td>31.20 mg/kg</td>
</tr>
<tr>
<td>Workers</td>
<td>Inhalation</td>
<td></td>
<td>long term – systemic effects</td>
<td>110 mg/m³</td>
</tr>
<tr>
<td>Consumers</td>
<td>Ingestion</td>
<td></td>
<td>long term – systemic effects</td>
<td>18.8 mg/kg</td>
</tr>
<tr>
<td>Consumers</td>
<td>Skin contact</td>
<td></td>
<td>long term – systemic effects</td>
<td>18.8 mg/kg</td>
</tr>
<tr>
<td>Consumers</td>
<td>Inhalation</td>
<td></td>
<td>long term – systemic effects</td>
<td>32.60 mg/m³</td>
</tr>
</tbody>
</table>
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Glycerol, propoxylated, esters with acrylic acid

<table>
<thead>
<tr>
<th></th>
<th>Workers</th>
<th>Skin contact</th>
<th>long term – systemic effects</th>
<th>1.92 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Inhalation</td>
<td>long term – systemic effects</td>
<td>16.22 mg/m3</td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Ingestion</td>
<td>long term – systemic effects</td>
<td>1.39 mg/kg</td>
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<tr>
<td></td>
<td>Consumers</td>
<td>Skin contact</td>
<td>long term – systemic effects</td>
<td>1.15 mg/kg</td>
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<tr>
<td></td>
<td>Consumers</td>
<td>Inhalation</td>
<td>long term – systemic effects</td>
<td>4.87 mg/m3</td>
</tr>
</tbody>
</table>

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

<table>
<thead>
<tr>
<th>Substance name</th>
<th>Environmental Compartment</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>aluminium powder (stabilised)</td>
<td>Fresh water</td>
<td>0.0749 mg/l</td>
</tr>
<tr>
<td>clarification plant</td>
<td></td>
<td>20 mg/l</td>
</tr>
<tr>
<td>1-isopropyl-2,2-dimethyltrimethylene diisobutyrate</td>
<td>Fresh water</td>
<td>0.014 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td>0.0014 mg/l</td>
</tr>
<tr>
<td></td>
<td>Fresh water sediment</td>
<td>5.29 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Soil</td>
<td>1.05 mg/kg</td>
</tr>
<tr>
<td></td>
<td>STP</td>
<td>3 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine sediment</td>
<td>0.529 mg/kg</td>
</tr>
<tr>
<td>Glycerol, propoxylated, esters with acrylic acid</td>
<td>Soil</td>
<td>0.00111 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Fresh water</td>
<td>0.00574 mg/l</td>
</tr>
<tr>
<td></td>
<td>Fresh water sediment</td>
<td>0.01697 mg/kg</td>
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<tr>
<td></td>
<td>Marine water</td>
<td>0.000574 mg/l</td>
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<tr>
<td></td>
<td>Marine sediment</td>
<td>0.001697 mg/kg</td>
</tr>
<tr>
<td></td>
<td>STP</td>
<td>10 mg/l</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

**Personal protective equipment**

Eye protection: Goggles

Wear face-shield and protective suit for abnormal processing problems.

Hand protection

Material: Solvent-resistant gloves (butyl-rubber)

Remarks:

Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). The exact break through time can be obtained from the protective glove producer and this has to be observed. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the
Skin and body protection: Choose body protection according to the amount and concentration of the dangerous substance at the workplace.

Respiratory protection: Use suitable breathing protection if workplace concentration requires.

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**: liquid
- **Colour**: silver
- **Odour**: characteristic
- **Odour Threshold**: No data available
- **pH**: No data available
- **Freezing point**: No data available
- **Boiling point/boiling range**: > 100 °C
- **Flash point**: > 100 °C
- **Evaporation rate**: No data available
- **Flammability (solid, gas)**: No data available
- **Self-ignition**: No data available
- **Auto-ignition temperature**: No data available
- **Smoldering temperature**: No data available
- **Decomposition temperature**: No data available
Explosive properties : No data available
Oxidizing properties : No data available
Upper explosion limit / Upper flammability limit : No data available
Lower explosion limit / Lower flammability limit : No data available
Vapour pressure : No data available
Relative vapour density : No data available
Relative density : No data available
Density : No data available
Bulk density : No data available
Solubility(ies)
  Water solubility : insoluble
Solubility in other solvents : No data available
Partition coefficient: n-octanol/water : No data available
Decomposition temperature : No data available
Viscosity, dynamic : No data available
Viscosity, kinematic : No data available
Flow time : 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.

**10.4 Conditions to avoid**

**Conditions to avoid:**
- Do not allow evaporation to dryness.

**No data available**

**10.5 Incompatible materials**

**Materials to avoid:**
- Acids
- Bases
- Oxidizing agents

**10.6 Hazardous decomposition products**

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

**Thermal decomposition:**
- This information is not available.

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**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

**Acute toxicity**

Not classified based on available information.

**Components:**

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

- 1-isopropyl-2,2-dimethyltrimethylene diisobutyrate:
  - Acute oral toxicity: LD50 (Rat): > 2,000 mg/kg
  - Acute dermal toxicity: LD50 Dermal (Rabbit): > 2,000 mg/kg
    - Method: OECD Test Guideline 402

**Skin corrosion/irritation**

Causes skin irritation.

**Product:**

Remarks: May cause skin irritation and/or dermatitis.
Components:
1-isopropyl-2,2-dimethyltrimethylene diisobutyrate:
Species: Rabbit
Exposure time: 4 h
Method: OECD Test Guideline 404
Result: No skin irritation

Serious eye damage/eye irritation
Causes serious eye irritation.

Product:
Remarks: Eye irritation

Components:
1-isopropyl-2,2-dimethyltrimethylene diisobutyrate:
Species: Rabbit
Exposure time: 72 h
Method: OECD Test Guideline 405
Result: No eye irritation

Respiratory or skin sensitisation
Skin sensitisation
May cause an allergic skin reaction.

Respiratory sensitisation
Not classified based on available information.

Product:
Remarks: Causes sensitisation.
May cause sensitisation of susceptible persons by skin contact.

Germ cell mutagenicity
Not classified based on available information.

Carcinogenicity
Not classified based on available information.

Reproductive toxicity
Not classified based on available information.

STOT - single exposure
Not classified based on available information.

STOT - repeated exposure
Not classified based on available information.

Aspiration toxicity
Not classified based on available information.
Further information

**Product:**
Remarks: No data available

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## SECTION 12: Ecological information

### 12.1 Toxicity

**Components:**

- 1-isopropyl-2,2-dimethyltrimethylene diisobutyrate:
  - Toxicity to daphnia and other aquatic invertebrates: *(Daphnia (water flea))*: 2.46 mg/l

### 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

**Product:**

**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 Other adverse effects

**Product:**

**Additional ecological information:**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life with long lasting effects.

---

## SECTION 13: Disposal considerations

**European Waste Catalogue:**

08 03 12 - waste ink containing dangerous substances

### 13.1 Waste treatment methods

**Product:**

The product should not be allowed to enter drains, water courses or the soil.
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.
In accordance with local and national regulations.

SECTION 14: Transport information

14.1 UN number
14.2 UN proper shipping name
14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards
14.6 Special precautions for user
Remarks : Not classified as dangerous in the meaning of transport regulations.

14.7 Transport in bulk according to Annex II of Marpol 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).

15.2 Chemical safety assessment
This information is not available.

SECTION 16: Other information

Full text of H-Statements
H228 : Flammable solid.
H314 : Causes severe skin burns and eye damage.
H317 : May cause an allergic skin reaction.
H318 : Causes serious eye damage.
H319 : Causes serious eye irritation.
H400 : Very toxic to aquatic life.
H410 : Very toxic to aquatic life with long lasting effects.
H411 : Toxic to aquatic life with long lasting effects.
H412 : Harmful to aquatic life with long lasting effects.

Full text of other abbreviations
Aquatic Acute : Acute aquatic toxicity
Aquatic Chronic : Chronic aquatic toxicity
Eye Dam. : Serious eye damage
Eye Irrit. : Eye irritation
Flam. Sol. : Flammable solids
Skin Corr. : Skin corrosion
Skin Sens. : Skin sensitisation
GB EH40 : UK. EH40 WEL - Workplace Exposure Limits
GB EH40 / TWA : Long-term exposure limit (8-hour TWA reference period)

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 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.