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

1.1 Product identifier
- Trade name: SUCP-70-W
- REACH Registration Number: 01-2120768791-42-0000
- EC-No.: 204-611-5

1.2 Relevant identified uses of the substance or mixture and uses advised against
- Use of the Substance/Mixture: polymerisation initiators

1.3 Details of the supplier of the safety data sheet
- Company: United Initiators GmbH
  Dr.-Gustav-Adolph-Str. 3
  82049 Pullach
- E-mail address of person responsible for the SDS: contact@united-in.com

1.4 Emergency telephone number
+49 / 89 / 74422 – 0 (24 h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
- Classification (REGULATION (EC) No 1272/2008)
  Organic peroxides, Type D
  H242: Heating may cause a fire.
  Skin corrosion, Sub-category 1B
  H314: Causes severe skin burns and eye damage.
  Serious eye damage, Category 1
  H318: Causes serious eye damage.

2.2 Label elements
- Labelling (REGULATION (EC) No 1272/2008)
  Hazard pictograms:
  ![Hazard pictograms]
  Signal word: Danger
Hazard statements:
H242 Heating may cause a fire.
H314 Causes severe skin burns and eye damage.

Precautionary statements:
Prevention:
P220 Keep/Store away from clothing/ strong acids, bases, heavy metal salts and other reducing substances /combustible materials.
P233 Keep container tightly closed.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P262 Do not get in eyes, on skin, or on clothing.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P315 Get immediate medical advice/ attention.

Storage:
P411 Store at temperatures not exceeding 10 °C.

Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

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

3.1 Substances
EC-No. : 204-611-5
Chemical nature : Organic Peroxide powder

Components
<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,4'-dioxo-4,4'</td>
<td>123-23-9</td>
<td></td>
<td>&gt;= 65 - &lt; 70</td>
</tr>
</tbody>
</table>
SECTION 4: First aid measures

4.1 Description of first aid measures

| General advice   | Move out of dangerous area.  
|                  | Show this safety data sheet to the doctor in attendance.  
|                  | Do not leave the victim unattended.  
|                  | Symptoms of poisoning may appear several hours later.  
|                  | Call a physician immediately.  
| Protection of first-aiders | First Aid responders should pay attention to self-protection and use the recommended protective clothing  
| If inhaled        | If unconscious, place in recovery position and seek medical advice.  
|                  | If symptoms persist, call a physician.  
|                  | If breathed in, move person into fresh air.  
| In case of skin contact | In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.  
|                  | Wash contaminated clothing before re-use.  
|                  | If on skin, rinse well with water.  
|                  | If on clothes, remove clothes.  
|                  | If symptoms persist, call a physician.  
| In case of eye contact | Small amounts splashed into eyes can cause irreversible tissue damage and blindness.  
|                  | In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
|                  | Continue rinsing eyes during transport to hospital.  
|                  | Remove contact lenses.  
|                  | Protect unharmed eye.  
|                  | Keep eye wide open while rinsing.  
|                  | If eye irritation persists, consult a specialist.  
| If swallowed      | Keep respiratory tract clear.  
|                  | Do NOT induce vomiting.  
|                  | Call a physician immediately.  
|                  | Rinse mouth thoroughly with water.  

4.2 Most important symptoms and effects, both acute and delayed

| Risks          | Causes serious eye damage.  
|               | Causes severe burns.  

(dioxydibutyric acid) 204-611-5
4.3 Indication of any immediate medical attention and special treatment needed

Treatment: Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Water spray jet
Alcohol-resistant foam
Carbon dioxide (CO2)
Dry chemical

Unsuitable extinguishing media: High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting: Contact with incompatible materials or exposure to temperatures exceeding SADT may result in a self-accelerating decomposition reaction with release of flammable vapors which may auto-ignite.
The product burns violently.
Flash back possible over considerable distance.
Vapours may form explosive mixtures with air.
Cool closed containers exposed to fire with water spray.

5.3 Advice for firefighters

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

Specific extinguishing methods: Do not use a solid water stream as it may scatter and spread fire.
Remove undamaged containers from fire area if it is safe to do so.
Use water spray to cool unopened containers.

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.
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.
Avoid dust formation.
Avoid breathing dust.
Remove all sources of ignition.
Follow safe handling advice and personal protective equipment recommendations.
Never return spills in original containers for re-use.
Treat recovered material as described in the section "Disposal considerations".

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:
Contact with incompatible substances can cause decomposition at or below SADT.
Clear spills immediately.
Suppress (knock down) gases/vapours/mists with a water spray jet.
To clean the floor and all objects contaminated by this material, use plenty of water.
Soak up with inert absorbent material.
Isolate waste and do not reuse.
Non-sparking tools should be used.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.

6.4 Reference to other sections
For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Technical measures: See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Advice on safe handling:
Do not swallow.
Do not breathe vapours/dust.
Avoid contact with skin and eyes.
Take precautionary measures against static discharges.
Never return any product to the container from which it was originally removed.
Provide sufficient air exchange and/or exhaust in work rooms.
Avoid confinement.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Smoking, eating and drinking should be prohibited in the application area.
Wash thoroughly after handling.
For personal protection see section 8.
Protect from contamination.

Advice on protection against fire and explosion:
Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from heat and sources of ignition. Use only explosion-proof equipment. Keep away from combustible material.

Hygiene measures:
Keep away from food and drink. When using do not eat or drink. When using do not smoke. Wash hands before breaks and immediately after handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers:
Avoid impurities (e.g. rust, dust, ash), risk of decomposition. Electrical installations / working materials must comply with the technological safety standards. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Store in accordance with the particular national regulations.

Advice on common storage:
Keep away from strong acids, bases, heavy metal salts and other reducing substances.

Recommended storage temperature:
< -10 °C

Further information on storage stability:
No decomposition if stored normally.

7.3 Specific end use(s)
Specific use(s):
For further information, refer to the product technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering measures
Minimize workplace exposure concentrations.
Personal protective equipment

Eye protection: Tightly fitting safety goggles
Please wear suitable protective goggles. Also wear face protection if there is a splash hazard.
Ensure that eyewash stations and safety showers are close to the workstation location.

Hand protection
- Material: butyl-rubber
- Break through time: >= 480 min
- Glove thickness: 0.5 mm

Skin and body protection: Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.

Respiratory protection: In the case of dust or aerosol formation use respirator with an approved filter.
- Filter type: Filter type P

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
- Appearance: powder
- Colour: white
- Odour: characteristic
- Odour Threshold: Not relevant
- pH: Not applicable
- Melting point/range: No data available
- Boiling point/boiling range: Decomposition: Decomposes below the boiling point.
- Flash point: Not applicable
- Flammability (solid, gas): Not applicable
- Upper explosion limit / Upper flammability limit: No data available
- Lower explosion limit / Lower flammability limit: No data available
- Vapour pressure: 23.4 hPa (20 °C)
### 9.2 Other information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Accelerating decomposition temperature (SADT)</td>
<td>30 °C</td>
</tr>
<tr>
<td>Method: UN-Test H.4</td>
<td></td>
</tr>
<tr>
<td>SADT-Self Accelerating Decomposition Temperature</td>
<td>Lowest temperature at which the tested package size will undergo a self-accelerating decomposition reaction.</td>
</tr>
</tbody>
</table>

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity
Stable under recommended storage conditions.

#### 10.2 Chemical stability
Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions
Hazardous reactions: Dust may form explosive mixture in air.

#### 10.4 Conditions to avoid
Conditions to avoid: Protect from contamination. Contact with incompatible substances can cause decomposition at or below SADT. Heat, flames and sparks.
Avoid confinement.

10.5 Incompatible materials

Materials to avoid: Accelerators, strong acids and bases, heavy metals and heavy metal salts, reducing agents

10.6 Hazardous decomposition products

Irritant, caustic, flammable, noxious/toxic gases and vapours can develop in the case of fire and decomposition

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not classified based on available information.

Product:

<table>
<thead>
<tr>
<th>Acute oral toxicity</th>
<th>LD50 (Rat, female): 2,646 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute inhalation toxicity</td>
<td>Remarks: No data available</td>
</tr>
<tr>
<td>Acute dermal toxicity</td>
<td>LD50 (Rat, male and female): &gt; 2,000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Assessment: The substance or mixture has no acute dermal toxicity</td>
</tr>
<tr>
<td></td>
<td>Remarks: No mortality observed at this dose.</td>
</tr>
<tr>
<td></td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
</tbody>
</table>

Components:

4,4’-dioxo-4,4’-dioxydibutyric acid:

<table>
<thead>
<tr>
<th>Acute oral toxicity</th>
<th>LD50 (Rat, female): 2,646 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute inhalation toxicity</td>
<td>Remarks: No data available</td>
</tr>
<tr>
<td>Acute dermal toxicity</td>
<td>LD50 (Rat, male and female): &gt; 2,000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Assessment: The substance or mixture has no acute dermal toxicity</td>
</tr>
<tr>
<td></td>
<td>Remarks: No mortality observed at this dose.</td>
</tr>
<tr>
<td></td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation

Causes severe burns.

Product:

<table>
<thead>
<tr>
<th>Result</th>
<th>Causes burns.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remarks</td>
<td>Extremely corrosive and destructive to tissue.</td>
</tr>
</tbody>
</table>
Components:
4,4’-dioxo-4,4’-dioxydibutyric acid:
Result: Causes burns.

Serious eye damage/eye irritation
Causes serious eye damage.

Product:
Remarks: May cause irreversible eye damage.

Components:
4,4’-dioxo-4,4’-dioxydibutyric acid:
Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

Skin sensitisation
Not classified based on available information.

Respiratory sensitisation
Not classified based on available information.

Product:
Remarks: No data available

Components:
4,4’-dioxo-4,4’-dioxydibutyric acid:
Remarks: No data available

Germ cell mutagenicity
Not classified based on available information.

Product:
Genotoxicity in vitro: Test Type: Ames test
Result: negative

Genotoxicity in vivo: Remarks: No data available

Components:
4,4’-dioxo-4,4’-dioxydibutyric acid:
Genotoxicity in vitro: Test Type: Ames test
Result: negative
Genotoxicity in vivo: Remarks: No data available

Carcinogenicity
Not classified based on available information.

Product:
Remarks: This information is not available.

Components:
4,4'-dioxo-4,4'-dioxydibutyric acid:
Remarks: This information is not available.

Reproductive toxicity
Not classified based on available information.

Components:
4,4'-dioxo-4,4'-dioxydibutyric acid:
Effects on foetal development: Remarks: No data available

STOT - single exposure
Not classified based on available information.

Product:
Remarks: No data available

Components:
4,4'-dioxo-4,4'-dioxydibutyric acid:
Remarks: No data available

STOT - repeated exposure
Not classified based on available information.

Product:
Remarks: No data available

Components:
4,4'-dioxo-4,4'-dioxydibutyric acid:
Remarks: No data available
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

SUCP-70-W

Repeated dose toxicity

**Product:**
Remarks: No data available

**Components:**

4,4'-dioxo-4,4'-dioxydibutyric acid:
Remarks: No data available

Aspiration toxicity

Not classified based on available information.

**Product:**
No data available

**Components:**

4,4'-dioxo-4,4'-dioxydibutyric acid:
No data available

Further information

**Product:**
Remarks: No data available

**Components:**

4,4'-dioxo-4,4'-dioxydibutyric acid:
Remarks: No data available

SECTION 12: Ecological information

12.1 Toxicity

**Product:**

<table>
<thead>
<tr>
<th>Toxicity to fish</th>
<th>LC50 (Brachydanio rerio (zebrafish)): &gt; 73 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure time</td>
<td>96 h</td>
</tr>
<tr>
<td>Test Type</td>
<td>static test</td>
</tr>
<tr>
<td>Method</td>
<td>OECD Test Guideline 203</td>
</tr>
<tr>
<td>Remarks</td>
<td>Information given is based on data obtained from similar substances.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
<th>EC50 (Daphnia magna (Water flea)): 13 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure time</td>
<td>48 h</td>
</tr>
<tr>
<td>Test Type</td>
<td>static test</td>
</tr>
</tbody>
</table>
Method: OECD Test Guideline 202
Remarks: Information given is based on data obtained from similar substances.

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 90.822 mg/l
Exposure time: 96 h
Method: ECOSAR (Ecological Structure Activity Relationships)

Components:

4,4’-dioxo-4,4’-dioxydibutyric acid:

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): > 73 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
Remarks: Information given is based on data obtained from similar substances.

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 13 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
Remarks: Information given is based on data obtained from similar substances.

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 90.822 mg/l
Exposure time: 96 h
Method: ECOSAR (Ecological Structure Activity Relationships)

12.2 Persistence and degradability

Product:

Biodegradability : Result: Readily biodegradable.

Components:

4,4’-dioxo-4,4’-dioxydibutyric acid:

Biodegradability : Result: Readily biodegradable.

12.3 Bioaccumulative potential

Components:

4,4’-dioxo-4,4’-dioxydibutyric acid:

Partition coefficient: n- : Remarks: No data available
octanol/water

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.

Components:
4,4’-dioxo-4,4’-dioxydibutyric acid:
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.

Components:
4,4’-dioxo-4,4’-dioxydibutyric acid:
Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

SECTION 13: Disposal considerations

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. Dispose of wastes in an approved waste disposal facility.

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. Dispose of in accordance with local regulations.

SECTION 14: Transport information

14.1 UN number

<table>
<thead>
<tr>
<th></th>
<th>ADN</th>
<th>ADR</th>
<th>RID</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UN 3116</td>
<td>UN 3116</td>
<td>UN 3116 (Not permitted for transport)</td>
<td>UN 3116 (Not permitted for transport)</td>
<td>UN 3116 (Not permitted for transport)</td>
</tr>
</tbody>
</table>

14.2 UN proper shipping name

<table>
<thead>
<tr>
<th></th>
<th>ADN</th>
<th>ADR</th>
<th>RID</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ORGANIC PEROXIDE TYPE D, SOLID, TEMPERATURE CONTROLLED (DISUCCINIC ACID PEROXIDE)</td>
<td>ORGANIC PEROXIDE TYPE D, SOLID, TEMPERATURE CONTROLLED (DISUCCINIC ACID PEROXIDE)</td>
<td>ORGANIC PEROXIDE TYPE D, SOLID, TEMPERATURE CONTROLLED (Not permitted for transport)</td>
<td>ORGANIC PEROXIDE TYPE D, SOLID, TEMPERATURE CONTROLLED (DISUCCINIC ACID PEROXIDE)</td>
<td>ORGANIC PEROXIDE TYPE D, SOLID, TEMPERATURE CONTROLLED (Not permitted for transport)</td>
</tr>
</tbody>
</table>

14.3 Transport hazard class(es)

<table>
<thead>
<tr>
<th></th>
<th>ADN</th>
<th>ADR</th>
<th>RID</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.2</td>
<td>5.2</td>
<td>Not permitted for transport</td>
<td>5.2</td>
<td>Not permitted for transport</td>
</tr>
</tbody>
</table>

14.4 Packing group

<table>
<thead>
<tr>
<th></th>
<th>ADN</th>
<th>Packing group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Not assigned by regulation</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

SUCP-70-W

Version 2.0  Revision Date: 22.01.2019  SDS Number: 600000000289  Date of last issue: 10.10.2017
Date of first issue: 04.07.2016

Classification Code: P2
Labels: 5.2

ADR
Packing group: Not assigned by regulation
Classification Code: P2
Labels: 5.2
Tunnel restriction code: (D)
RID: Not permitted for transport

IMDG
Packing group: Not assigned by regulation
Labels: 5.2
EmS Code: F-F, S-R
IATA (Cargo): Not permitted for transport
IATA (Passenger): Not permitted for transport

14.5 Environmental hazards

ADN
Environmentally hazardous: no

ADR
Environmentally hazardous: no

RID
Marine pollutant: no

14.6 Special precautions for user

Additional advice:

Temperature controlled transport:
Control temperature: 10 °C
Emergency temperature: 15 °C

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country 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): Not applicable
REACH - List of substances subject to authorisation (Annex XIV): Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer: Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants: Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals: Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII): Not applicable


P6b SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES

Quantity 1: 50 t
Quantity 2: 200 t

Other regulations:

Gefahrgruppe nach § 3 BGV B4: II (German regulatory requirements)

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

The components of this product are reported in the following inventories:

ENCS (JP): On the inventory, or in compliance with the inventory

ISHL (JP): On the inventory, or in compliance with the inventory

KECI (KR): On the inventory, or in compliance with the inventory

PICCS (PH): On the inventory, or in compliance with the inventory

IECSC (CN): On the inventory, or in compliance with the inventory

TCSI (TW): On the inventory, or in compliance with the inventory

TSCA (US): On TSCA Inventory

15.2 Chemical safety assessment
This information is not available.
SECTION 16: Other information

Full text of other abbreviations

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; SVHC - Substance of Very High Concern; 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

Other information : This safety datasheet only contains information relating to safety and does not replace any product information or product specification. These safety instructions also apply to empty packaging which may still contain product residues.

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.

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