CLASSIFICATION AND LABELLING

1. Classification and labelling according to CLP / GHS

Name: zinc oxide standard
Implementation: EU
State/form of the substance: powder

Classification and labelling according to CLP / GHS for physicochemical properties
Not classified for physicochemical properties

Classification and labelling according to CLP / GHS for health hazards
Not classified for health hazards

Classification and labelling according to CLP / GHS for environmental hazards

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Hazard category</th>
<th>Hazard statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazards to the aquatic environment (acute/short-term):</td>
<td>Aquatic Acute 1</td>
<td>H400: Very toxic to aquatic life.</td>
</tr>
<tr>
<td>Hazards to the aquatic environment (long-term):</td>
<td>Aquatic Chronic 1</td>
<td>H410: Very toxic to aquatic life with long lasting effects.</td>
</tr>
<tr>
<td>M-Factor acute: 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M-Factor chronic: 1</td>
<td></td>
<td></td>
</tr>
</tbody>
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Labelling

Signal word: Warning

Hazard pictogram:
GHS09: environment

Hazard statements:
H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements:
P273: Avoid release to the environment.
P391: Collect spillage.
P501: Dispose of contents/container to...

Name: zinc oxide lower grade (lead containing)
Implementation: EU
State/form of the substance: powder
Classification and labelling according to CLP / GHS for physicochemical properties

Not classified for physicochemical properties

Classification and labelling according to CLP / GHS for health hazards

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<tr>
<td>Acute toxicity - oral:</td>
<td>Acute Tox. 4</td>
<td>H302: Harmful if swallowed.</td>
</tr>
<tr>
<td>Acute toxicity - inhalation:</td>
<td>Acute Tox. 4</td>
<td>H332: Harmful if inhaled.</td>
</tr>
<tr>
<td>Reproductive Toxicity:</td>
<td>Repr. 1A</td>
<td>H360: May damage fertility or the unborn child &lt;state specific effect if known&gt; &lt;state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard&gt;.</td>
</tr>
<tr>
<td>Specific target organ toxicity - repeated:</td>
<td>STOT Rep. Exp. 2</td>
<td>H373: May cause damage to organs &lt;or state all organs affected, if known&gt; through prolonged or repeated exposure &lt;state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard&gt;.</td>
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Labelling

Signal word: Danger

Hazard pictogram:

GHS07: exclamation mark

GHS08: health hazard

GHS09: environment
Hazard statements:

H360: May damage fertility or the unborn child.
H302+H332: Harmful if swallowed or inhaled.
H373: May cause damage to central nervous system, reproductive system through prolonged or repeated oral.
H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P280: Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P273: Avoid release to the environment.
P391: Collect spillage.
P501: Dispose of contents/container to...

Name: Zinc oxide nano

Implementation: EU

State/form of the substance: nanomaterial

Classification and labelling according to CLP / GHS for physicochemical properties

Not classified for physicochemical properties

Classification and labelling according to CLP / GHS for health hazards

Not classified for health hazards

Classification and labelling according to CLP / GHS for environmental hazards

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Labelling

Signal word: Warning

Hazard pictogram:

GHS09: environment

Hazard statements:
H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P273: Avoid release to the environment.
P391: Collect spillage.
P501: Dispose of contents/container to...

2. Classification and labelling according to DSD / DPD


Chemical name: zinc oxide standard

Classification and labelling in Annex I of Directive 67/548/EEC for physicochemical properties

Not classified for physicochemical properties


Not classified for health properties

Classification and labelling in Annex I of Directive 67/548/EEC for the environment

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<tr>
<th>Endpoint</th>
<th>Classification</th>
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<tr>
<td>Environment</td>
<td>N; R50/53 Dangerous for the environment; Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</td>
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Labelling

Indication of danger:

N - dangerous for the environment

R-phrases:

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S-phrases:

S60 - this material and its container must be disposed of as hazardous waste
S61 - avoid release to the environment. refer to special instructions/safety data sheets

Chemical name: zinc oxide nano

Classification and labelling in Annex I of Directive 67/548/EEC for physicochemical properties

Not classified for physicochemical properties


Not classified for health hazards

Classification and labelling in Annex I of Directive 67/548/EEC for the environment

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Labelling

Indication of danger:

N - dangerous for the environment

R-phrases:

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S-phrases:

S61 - avoid release to the environment. refer to special instructions/safety data sheets
S60 - this material and its container must be disposed of as hazardous waste

3.2.2. Self classification(s)

Chemical name: zinc oxide lower grade (lead containing)

Self classification according to Directive 67/548/EEC criteria

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<tr>
<td>Acute toxicity</td>
<td>Xn; R20/22 Harmful by inhalation and if swallowed.</td>
</tr>
<tr>
<td>Repeated dose toxicity</td>
<td>R33 Danger of cumulative effects.</td>
</tr>
<tr>
<td>Toxicity to reproduction-develop</td>
<td>Repr. Cat. 1; R61 May cause harm to the unborn child.</td>
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<tr>
<td>Environment</td>
<td>N; R50/53 Dangerous for the environment; Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</td>
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Labelling

Indication of danger:

T - toxic
N - dangerous for the environment

R-phrases:

R61 - May cause harm to the unborn child
R20/22 - Harmful by inhalation and if swallowed
R33 - Danger of cumulative effects
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S-phrases:

S53 - avoid exposure - obtain special instructions before use
S20/21 - when using do not eat, drink or smoke
S36/37/39 - wear suitable protective clothing, gloves and eye/face protection
S45 - in case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
S60 - this material and its container must be disposed of as hazardous waste
S61 - avoid release to the environment. Refer to special instructions/safety data sheets