SECTION 1: Identification of the substance / preparation and of the company

1.1 Product identifier

28-731

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

1.2.1 Relevant uses

Toner

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company: Pelikan Hardcopy Production AG
Haldenstrasse 30
8620 Wetzikon / SWITZERLAND
Phone +41 (0) 44 9861-299

Address enquiries to:
Technical information
Safety Data Sheet: sdb@chemiebuero.de

1.4 Emergency phone

Company: +41 (0) 44 9861-299 Mo-Fr 8:00-17:00

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]

see SECTION 16

2.1.2 Classification according to Regulation 67/548/EEC or 1999/45/EC

Hazard symbols: none

R-phrases: R 52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The product is classified and required to be labelled in accordance with EC-Directives

2.2 Label elements

Labelling according to Regulation 67/548/EEC or 1999/45/EC

Hazard symbols: none

R-phrases: R 52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.3 Other hazards

Physico-chemical hazards: Accumulation of fine dust may entail the risk of a dust explosion in the presence of air (only in circumstances of an uncontrolled release of dust from the product).

Human health dangers: No particular hazards known.

Environmental hazards: Does not contain any PBT or vPvB substances.

Other hazards: Further hazards were not determined with the current level of knowledge.
SECTION 3: Composition / Information on ingredients

3.1 Product-type:
The product is a mixture.

<table>
<thead>
<tr>
<th>Range [%]</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 2</td>
<td>bis(3,5-di-tert-butylsalicylato-O1,O2)zinc</td>
</tr>
</tbody>
</table>

CAS: 42405-40-3, EINECS/ELINCS: 403-360-0, EU-INDEX: 030-007-00-4

GHS/CLP: Flam. Sol. 1 - H228 - Acute Tox. 4 - H302 - Aquatic Acute 1 - H400 - Aquatic Chronic 1 - H410, M = 1

EEC: N-Xn-F, R 11-22-50/53

Comment on component parts
Pre-registered according REACH legislation.
Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For the wording of the listed risk phrases refer to SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Change powdered clothing.

Inhalation
Ensure supply of fresh air.
In the event of symptoms seek for medical treatment.

Skin contact
When in contact with the skin, clean with soap and water.
Consult a doctor if skin irritation persists.

Eye contact
In case of contact with eyes rinse thoroughly with water.
In the event of symptoms seek for medical treatment.

Ingestion
In the event of symptoms seek for medical treatment.
Rinse out mouth and give plenty of water to drink.

4.2 Most important symptoms and effects, both acute and delayed
None known.

4.3 Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media
Water spray jet.
Dry powder.
Carbon dioxide.
Foam.

Extinguishing media that must not be used
Full water jet

5.2 Special hazards arising from the substance or mixture
Unknown risk of formation of toxic pyrolysis products.

5.3 Advice for firefighters
Use self-contained breathing apparatus.
Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation.
Avoid dust formation.

6.2 Environmental precautions
Do not discharge into the drains/surface waters/groundwater.
6.3 Methods and material for containment and cleaning up

Take up mechanically.
Avoid raising dust.
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid the formation and deposition of dust.
Provide vacuuming if dust raised.
Dust can form an explosive mixture with air (only in circumstances of an uncontrolled release of dust from the product)

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.
Do not store together with oxidizing agents.
Store in a dry place.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

<table>
<thead>
<tr>
<th>Range [%]</th>
<th>Substance</th>
<th>CAS:</th>
<th>EINECS/ELINCS:</th>
<th>Long-term exposure</th>
<th>Short-term exposure (15-minute)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,5 - 10</td>
<td>Carbon black</td>
<td>1333-86-4, EINECS/ELINCS: 215-609-9</td>
<td>3.5 mg/m³</td>
<td>7 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

8.2 Exposure controls

Additional advice on system design
Ensure adequate ventilation on workstation.

Eye protection
Safety glasses.

Hand protection
butyl rubber, > 120 min (EN 374)
The details concerned are recommendations. Please contact the glove supplier for further information.

Skin protection
not applicable

Other
Avoid contact with eyes and skin.
Do not inhale dust.
Wash hands before breaks and after work.
Use barrier skin cream.

Respiratory protection
Breathing apparatus in the event of high concentrations.
short term: filter apparatus, filter P1

Thermal hazards
not applicable

Delimitation and monitoring of the environmental exposition
See SECTION 6+7.
SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form: powder
Color: black
Odor: characteristic
Odour threshold: not applicable
pH-value: not applicable
pH-value [1%]: not applicable
Boiling point [°C]: not applicable
Flash point [°C]: not applicable
Flammability [°C]: not applicable
Lower explosion limit: not determined
Upper explosion limit: not determined
Oxidizing properties: no
Vapour pressure/gas pressure [kPa]: not applicable
Density [g/ml]: not determined
Bulk density [kg/m³]: not determined
Solubility in water: virtually insoluble
Partition coefficient [n-octanol/water]: not determined
Viscosity: not applicable
Relative vapour density determined in air: not applicable
Evaporation speed: not applicable
Melting point [°C]: not determined
Autoignition temperature [°C]: not determined
Decomposition temperature: not determined

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Accumulation of fine dust may entail the risk of a dust explosion in the presence of air (only in circumstances of an uncontrolled release of dust from the product).
Reactions with oxidizing agents.

10.4 Conditions to avoid

See SECTION 7.2.

10.5 Incompatible materials

not determined

10.6 Hazardous decomposition products

No hazardous decomposition products known.
SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50, inhalative, Rat:</td>
<td>&gt; 5.19 mg/l</td>
</tr>
<tr>
<td>LD50, oral, Rat:</td>
<td>&gt; 2500 mg/kg</td>
</tr>
</tbody>
</table>

Serious eye damage/irritation: not determined
Skin corrosion/irritation: not determined
Respiratory or skin sensitisation: not determined
Specific target organ toxicity — single exposure: not determined
Specific target organ toxicity — repeated exposure: not determined
Mutagenicity: Ames-test: negative.
Reproduction toxicity: not determined
Carcinogenicity: not determined

General remarks: Analogous to product with a similar composition.

SECTION 12: Ecological information

12.1 Toxicity

IC50, (72h), Pseudokirchneriella subcapitata: 100 mg/l.

12.2 Persistence and degradability

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behaviour in environment compartments</td>
<td>not determined</td>
</tr>
<tr>
<td>Behaviour in sewage plant</td>
<td>not determined</td>
</tr>
<tr>
<td>Biological degradability</td>
<td>not determined</td>
</tr>
</tbody>
</table>

12.3 Bioaccumulative potential

not determined

12.4 Mobility in soil

not determined

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Other adverse effects

The product was classified on the basis of the calculation procedure of the preparation directive.
SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Coordinate disposal with the authorities if necessary.
For recycling, consult manufacturer.

Waste no. (recommended) 080317*

Contaminated packaging

Uncontaminated packaging may be taken for recycling.

Waste no. (recommended) 150102
150110*

SECTION 14: Transport information

14.1 UN number

See SECTION 14.2 in accordance with UN shipping name

14.2 UN proper shipping name

Transport by land according to ADR/RID NO DANGEROUS GOODS

Inland navigation (ADN) NO DANGEROUS GOODS

Marine transport in accordance with IMDG NOT CLASSIFIED AS “DANGEROUS GOODS”

Air transport in accordance with IATA NOT CLASSIFIED AS “DANGEROUS GOODS”

14.3 Transport hazard class(es)

See SECTION 14.2 in accordance with UN shipping name

14.4 Packing group

See SECTION 14.2 in accordance with UN shipping name

14.5 Environmental hazards

See SECTION 14.2 in accordance with UN shipping name

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information

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


http://www.chemiebuero.de, Phone +49 (0)941-566-398 (-455), E-mail info@chemiebuero.de, v. 120731b pek00224 GB
SECTION 16: Other informations

16.1 Classification according to Regulation (EC) No 1272/2008 [CLP]

GHS Symbols

Aquatic Chronic 3 - H412 Harmful to aquatic life with long lasting effects.

16.2 R-phrases (SECTION 03)

R 11: Highly flammable.
R 22: Harmful if swallowed.
R 50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

16.3 Hazard statements (SECTION 03)

H228 Flammable solid.
H302 Harmful if swallowed.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

16.4 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
ELINCS = European List of Notified Chemical Substances
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform Chemical Information Database
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

Modified position

SECTION 2 been added: Aquatic Chronic 3
SECTION 2 been added: R 52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
SECTION 13 deleted:
SECTION 13 been added:
SECTION 12 deleted: Analogous to product with a similar composition.
SECTION 12 been added: The product was classified on the basis of the calculation procedure of the preparation directive.
SECTION 2 been added: The product is classified and required to be labelled in accordance with EC-Directives
16.5 Other informations

Observe employment restrictions for no people
VOC (1999/13/CE) 0 %

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