Safety data sheet
in accordance with directive 91/155/EEC

delta pronatura
Ideen, Leistung ... und Zuverlässigkeit

Date of issue: 17.03.1998
n.a.p. = not applicable
n.a.v. = not available
(*) = alteration in opposition to preceding version

1. Identification of the substance/preparation and of the company/undertaking
1.1 Identification of the substance or preparation

Product group: CARBONA® Stain Devils
CANDLEWAX, TAR & RESIN

Trade name: carb0028
Formulation No.: 08/94
Article No.: 410

1.2 Manufacturer: delta pronatura
Hans-Böckler-Str. 5
D-53263 Neu-Issenburg

Distributor: Delta Carbone L.P.
461 Route 46 West
Fairfield, NJ 07004

1.3 Emergency telephone number
Toll free:
1 888 746-5599

2. Composition/information on ingredients
This product is a preparation, namely a solution of special active substances.

2.1 Substances presenting a health hazard within the meaning of Directive 67/548/EEC

<table>
<thead>
<tr>
<th>CAS number</th>
<th>EEC number</th>
<th>Identification</th>
<th>m%</th>
<th>Symbols</th>
<th>R-phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>5131-66-8</td>
<td>225-878-4</td>
<td>3-butoxypropano-2-ol</td>
<td>1-5</td>
<td>Xi</td>
<td>36/38</td>
</tr>
<tr>
<td>n.a.</td>
<td>n.a.</td>
<td>fatty alcohol polyglycol ether</td>
<td>5-15</td>
<td>Xi</td>
<td>36</td>
</tr>
<tr>
<td>122-99-6</td>
<td>204-589-7</td>
<td>2-phenoxyethanol</td>
<td>1-5</td>
<td>Xn</td>
<td>22-36</td>
</tr>
<tr>
<td>127036-24-2</td>
<td>205-341-0</td>
<td>fatty alcohol polyglycol ether</td>
<td>1-5</td>
<td>Xi</td>
<td>36/38</td>
</tr>
<tr>
<td>128-86-3</td>
<td></td>
<td>methadione-1,8(9)</td>
<td>1-5</td>
<td>Xn</td>
<td>38</td>
</tr>
</tbody>
</table>

The product does not require a hazard warning label in accordance with EC directives/German regulations on dangerous substances. See No. 15.

2.2 Substances subject to recognised exposure limit values pursuant to Community provisions but which are not covered by the Directive 67/548/EEC
Ethanol, 2-propanol, hydrocarbons, dipropylene glycol monomethyl ether.

2.3 Additional information
None.

3. Hazards possibilities
3.1 Hazards identification
Highly flammable.

3.2 Critical hazards to man
This product is highly flammable.

3.3 Critical hazards to the environment
Product is hazardous to water.

4. First aid measures
4.1 General information
Remove contaminated, soaked clothing immediately and dispose of safely.

4.2 after inhalation
Remove the casualty into fresh air and keep him calm.
In the event of symptoms take medical treatment.

4.3 after contact with skin
In case of contact with skin wash off immediately with water.
Consult a doctor if skin irritation persists.

4.4 after contact with eyes
In case of contact with eyes rinse thoroughly with plenty of water.
Consult physician.

4.5 after ingestion
Call physician immediately.

4.6 Hints for the physician
Product has a degreasing effect on the skin, by prolonged contact skin irritation may be possible.

Symptoms
If swallowed, in the event of vomiting, risk of product entering the lungs.

Hazards
Avoid vomiting.
<table>
<thead>
<tr>
<th>5.</th>
<th>Fire-fighting measures</th>
<th>Water spray jet, carbon dioxide, dry powder.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>Suitable extinguishing media</td>
<td>Full water jet.</td>
</tr>
<tr>
<td>5.2</td>
<td>Extinguishing media which must not be used for safety reasons</td>
<td>In the event of fire the following can be released: Carbon monoxides and other toxic materials. Hydrocarbons. Do not inhale explosion and combustion gases. Use breathing apparatus.</td>
</tr>
<tr>
<td>5.3</td>
<td>Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases</td>
<td>Wear full protective suit. Cool endangered containers with water spray jet. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations. Vapours are heavier than air and can form an explosive mixture with air.</td>
</tr>
<tr>
<td>5.4</td>
<td>Special protective equipment for firefighters</td>
<td></td>
</tr>
<tr>
<td>5.5</td>
<td>Further information</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6.</th>
<th>Accidental release measures</th>
<th>(see also section 8., Personal protective equipment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1</td>
<td>Personal precautions</td>
<td>Ensure adequate ventilation. Use personal protective clothing. Use breathing apparatus if exposed to vapours.</td>
</tr>
<tr>
<td>6.2</td>
<td>Environmental precautions</td>
<td>Do not discharge into the drains/surface waters/groundwater.</td>
</tr>
<tr>
<td>6.3</td>
<td>Methods for cleaning up / taking up</td>
<td>Pick up with absorbent material. Send in suitable containers for recovery or disposal. Cleaning operations should be carried out only with breathing apparatus. Dispose of absorbed material in accordance with the regulations. Vapours are heavier than air and can form an explosive mixture with air.</td>
</tr>
<tr>
<td>6.4</td>
<td>Additional information</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7.</th>
<th>Handling and storage</th>
<th>(National measures see sections 15. and 16.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1</td>
<td>Handling</td>
<td>Use solvent-resistant equipment. Keep away from sources of ignition. Do not smoke. Take precautionary measures against electrostatic loading. Vapours are heavier than air and can form an explosive mixture with air. Ignitable mixtures can form in the empty container.</td>
</tr>
<tr>
<td>7.2</td>
<td>Storage</td>
<td></td>
</tr>
<tr>
<td>7.2.1</td>
<td>Requirements for storage rooms and vessels</td>
<td>Provide solvent-resistant and impermeable floor. Keep container tightly closed. Keep container in a well-ventilated place. Keep in a cool place. Do not store together with explosive or flammable material and strong oxidizing agents.</td>
</tr>
<tr>
<td>7.2.2</td>
<td>Advice on storage compatibility</td>
<td>None.</td>
</tr>
<tr>
<td>7.2.3</td>
<td>Further information on storage conditions</td>
<td>Storage class (for Germany only) 3A</td>
</tr>
</tbody>
</table>
8. Exposure controls / personal protection
8.1 Additional advice on system design    No additional advice.
8.2 Ingredients with occupational exposure limits to be monitored (for Germany only)

<table>
<thead>
<tr>
<th>CAS number</th>
<th>Identification</th>
<th>Limit values</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5</td>
<td>ethanol</td>
<td>1000 mg/m³</td>
<td>TRGS 900</td>
</tr>
<tr>
<td>67-63-0</td>
<td>2-propanol</td>
<td>400 mg/m³</td>
<td>TRGS 900</td>
</tr>
<tr>
<td>64742-49-9</td>
<td>hydrocarbons, deaeromized</td>
<td>200 mg/m³</td>
<td>TRGS 900</td>
</tr>
<tr>
<td>34590-94-8</td>
<td>dipropylene glycol</td>
<td>308 mg/m³</td>
<td>TRGS 900</td>
</tr>
<tr>
<td></td>
<td>monomethylether</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.3 Personal protective equipment

Respiratory protection: If ventilation insufficient, use a respirator with or without filters.

Hand protection: Gloves (solvent-resistant).

Eye protection: Safety glasses.

Body protection: Protective clothing.

General protective measures: Do not inhale vapours.

and hygiene measures: Avoid contact with eyes and skin.

9. Physical and chemical properties

9.1 Appearance

Physical state: liquid

9.2 Data relevant to safety

CHIP (as supplied): n.a.

Boiling point / boiling range (°C): n.a.

Melting point / melting range (°C): n.a.

Thermal decomposition (°C): n.a.

Flash point (°C), c.c.: -1

Flammability (solid, gas): n.a.

Autoignition: n.a.

Ignition temperature (°C): n.a.

Self-ignition temperature (°C): n.a.

Oxidizing properties: n.a.


Vapour pressure: n.a.

Relative density / Bulk density: ca. 0.852 g/cm³

Solubility in water: partly soluble

Soluble in: most organic solvents

Partition coefficient: n-octanol/water: n.a.

Viscosity (40°C) (m²/s): 17.60-18.78 x 10⁻⁴

Other data: Vapours are heavier than air and can form an explosive mixture with air.

10. Stability and reactivity

10.1 Conditions to avoid / materials to avoid

Because of the high vapour pressure, containers are liable to burst if temperature rises.

Reactions with strong oxidizing agents possible.

10.2 Hazardous decomposition products

Carbon monoxide.

10.3 Additional information

Only use solvent resistant instruments.
## 11. Toxicological Information

### 11.1 Toxicological Examination

**Acute oral toxicity / acute dermal toxicity / acute inhalation toxicity**

<table>
<thead>
<tr>
<th>LD50 rat, oral (mg/kg)</th>
<th>n.a.v.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 rat, dermal (mg/kg)</td>
<td>n.a.v.</td>
</tr>
<tr>
<td>LC50 rat, inhalation (mg/l/4h)</td>
<td>n.a.v.</td>
</tr>
</tbody>
</table>

**Irritant effect**

- Irritant effect on skin: n.a.v.
- Irritant effect on eyes: n.a.v.

**Sensitization**

n.a.v.

**Subacute toxicity / Sub-chronic toxicity / Chronic toxicity**

n.a.v.

**Mutagenicity / Teratogenicity / Carcinogenicity**

n.a.v.

**Further information**

The composition of the product does not expect a toxic agent. None.

The product does require a hazard warning label because of the flash point in accordance with EC directives/German regulations on dangerous substances.

## 12. Ecological Information

### 12.1 Data on elimination (persistence and degradability)

Ecological data are not available.

Ecological data are not available.

### 12.2 Behaviour in environmental compartments

n.a.v.

n.a.v.

n.a.v.

### 12.3 Ecotoxic effect

**Fish toxicity / daphnia toxicity / algae toxicity / bacteria toxicity**

| LC50 (fish) | n.a.v. |
| EC50 (daphnia) | n.a.v. |
| IC50 (algae) | n.a.v. |

**Behaviour in sewage works**

The behaviour of the product in sewage treatment plants has not been tested.

### 12.4 Further ecological information

- Dissolved Organic carbon (DOC)
- Chemical oxygen demand (COD)
- Biochemical oxygen demand (BODS)

n.a.v.

### Contains substances according to RL 76/464/EEC

- Mineral oil formed hydrocarbons, list I.
14. Transport information
14.1 Road transport ADR / RID / GGVS / GGVE
Class: 3
Hazard number: 3

14.2 Marine transport IMDG-Code
Class: 3.2
Risk label: Flammable liquid

14.3 Air transport ICAO / IATA-DGR
Class: 3
Risk label: Flammable liquid

15. Regulatory information
15.1 Labelling in accordance with Directive EEC
Symbol(s) of danger: F
Indication(s) of danger: Highly flammable
Hazardous component(s) to be indicated on label:
R-phrases: R 11
S-phrases: S 2, S 7, S 16, S 29, S 33, S 46

Special labelling for certain preparations:
Note:

15.2 National measures (for Germany only)
Restraint of occupation:
Incident regulations:
Classification according to VbF:
TA-Luft:
Water hazard class:

16. This information is based on our present state of knowledge.
It should not therefore be construed as guaranteeing specific properties of the products as
described or their suitability for a particular application.