Material Safety Data Sheet

Version: 2.0.1 / USA

1.) Identification of the substance/mixture and of the company/undertaking

Trade name

Details of the supplier of the safety data sheet
Address
TIMCAL BELGIUM N.V.
Appeldonkstraat, 173
B-2830 Willebroek
Telephone no. +32 (0)3 886 71 81

Emergency telephone
For Chemical Emergency ONLY (spill, leak, fire, exposure or accident), call CHEMTREC at +1 800 424 9300.
For ALL other inquiries about this product, call Timcal at +32 (0)3 886 71 81

Advice on Safety Data Sheet
sdb_info@umco.de

Supplier
Address
TIMCAL AMERICA INC.
Representative Office
29299 Clemens Road 1-L
Westlake, Ohio 44145 USA
Telephone no. +1-440-871-7504
Fax no. +1-440-871-7504

2.) Hazards identification

Potential Health Effects
Eye
May cause eye irritation.

Skin
May cause skin irritation.

Inhalation
May cause respiratory tract irritation.

Ingestion
No hazard in normal industrial use.

Cancer
Carbon Black is listed:
by IARC: as group 2B carcinogen (carcinogenic in animals; possible human carcinogen).
By ACGIH: A4 not classifiable as a Human Carcinogen.
By NIOSH: occupational carcinogen.
By OSHA: possible select carcinogen.

3.) Composition / information on ingredients

Chemical characterization
Soot (carbon black), mineral origin, > 96%

Substance / product identification
CAS no. 1333-86-4
EC no. 215-609-9

4.) First aid measures

General information
In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.
After inhalation
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult give Oxygen. Get medical attention.

After skin contact
Wash with soap and water.

After eye contact
Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes.

After ingestion
Rinse mouth thoroughly with water. By continuous complaints consult a physician. Never give anything by mouth to an unconscious person.

5.) **Firefighting measures**

**Suitable extinguishing media**
Foam; Carbon dioxide; Extinguishing powder; Water mist

**Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases**
In the event of fire, the following can be released: Carbon dioxide (CO2); Carbon monoxide (CO)

**Special protective equipment for firefighting**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**Other information**
Product burns or smoulders with temperatures > 430°C. Monitor for at least 48 hours to make sure that the material does not gleam anymore.

6.) **Accidental release measures**

**Personal precautions**
Refer to protective measures listed in sections 7 and 8. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Avoid dust formation.

**Environmental precautions**
Do not discharge into the drains/surface waters/groundwater.

**Methods for cleaning up/taking up**
Absorb, collect using a suitable dust-attracting material. Send in suitable containers for recovery or disposal.

7.) **Handling and storage**

**Handling**

Advice on safe handling
Soot handling instructions for closed rooms, silos or containers are given under chapter 8. Provide good ventilation of working area (local exhaust ventilation if necessary). If workplace exposure limits are exceeded, respiratory protection approved for this particular job must be worn.

Advice on protection against fire and explosion
Dust can form an explosive mixture with air. Take measures against dust explosion. Keep away from sources of heat and ignition.

**Storage**

Requirements for storage rooms and vessels
Containers which are opened must be carefully resealed and kept upright to prevent leakage. Always keep in containers of same material as the original one.

Hints on storage assembly
Do not store together with: Oxidizing agents

Further information on storage conditions
Keep container tightly closed and dry in a cool, well-ventilated place.
8.) **Exposure controls / personal protection**

**Exposure limit values**

**CARBON BLACK**

<table>
<thead>
<tr>
<th>CAS no.</th>
<th>1333-86-4</th>
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<tbody>
<tr>
<td>EC no.</td>
<td>215-609-9</td>
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**ACGIH**

| Carbon black | TWA | 3.5 | mg/m³ |

**LIMITS FOR AIR CONTAMINANTS (OSHA)**

| Carbon black | TWA | 3.5 | mg/m³ |

**Exposure controls**

**Personal protective equipment**

**Respiratory protection**

Respiratory protection in closed rooms: Obligatory use of a breathing apparatus independent of ambient air when accessing closed soot stores (silos and containers). The respirator must comply with local rules. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

**Hand protection**

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective glove should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves. The glove(s) listed below may provide protection against permeation. Gloves of other chemically resistant materials may not provide adequate protection.

<table>
<thead>
<tr>
<th>Appropriate Material</th>
<th>Latex</th>
</tr>
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<tbody>
<tr>
<td>Appropriate Material</td>
<td>Polyethylene</td>
</tr>
<tr>
<td>Appropriate Material</td>
<td>Vinyl</td>
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</tbody>
</table>

**Eye protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.

**Skin protection**

Wear appropriate clothing to minimize contact with skin.

**General protective and hygiene measures**

The application of a barrier cream makes the removal of the carbon black from the skin easier, when washed with water and soap. Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Avoid contact with eyes and skin. Remove soiled or soaked clothing immediately. Wash hands before breaks and after work. Do not inhale dust. Provide eye wash fountain in work area.

9.) **Physical and chemical properties**

**General information**

<table>
<thead>
<tr>
<th>Form</th>
<th>Powder / granulates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>black</td>
</tr>
<tr>
<td>Odor</td>
<td>odorless</td>
</tr>
</tbody>
</table>

**Important health, safety and environmental information**

**Changes in physical state**

| Remarks | no data available |

**Flash point**

| Remarks | not applicable |

**Ignition temperature**

<table>
<thead>
<tr>
<th>Value</th>
<th>&gt; 500 °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remarks</td>
<td>Ignition energy min. 1000 J</td>
</tr>
</tbody>
</table>

**Explosion limits**

| Lower explosion limit | 50 g/m³ |
Density
Value 1.8 - 2.0 g/cm³
Reference temperature 25 °C
Bulk density
Value 0.12 - 0.25 g/ml
Solubility in water
Remarks insoluble
pH value
Value 7 - 10
Method ASTM D1512-05

10.) Stability and reactivity
Conditions to avoid
Contact with open flames.
Materials to avoid
Oxidizing agents
Hazardous decomposition products
None, if handled according to order
Thermal decomposition
Value > 400 °C

11.) Toxicological information
Acute toxicity
Acute oral toxicity
LD50 > 15400 mg/kg
Species rat
Source RTECS
Acute dermal toxicity
LD50 > 3000 mg/kg
Species rabbit
Source RTECS
Effects after repeated or prolonged exposition (subacute, subchronic, chronic)
Carcinogenicity
IARC classification: 2B (IARC Monograph Volume 65, 12.4.1996) "may cause cancer to human being". This classification is basing on inhalation studies carried out with rats where the oncogenesis has been assessed by many toxicologists as "specific to species" and not "directly contagious to human being".
ACGIH: A4 not classifiable as a Human Carcinogen.
NIOSH: occupational carcinogen.
OSHA: possible select carcinogen.

Experience in practice
Repeated and prolonged skin contact may lead to defatting and irritation of the skin. Eye contact may cause mechanical irritation through dust particles. Inhalation of dusts may irritate the respiratory tract.

12.) Ecological information
Mobility
Remarks The product is insoluble in water.
Bioaccumulative potential
Remarks Not potentially bioaccumulative.
Other information
Do not discharge into the drains or waters and do not store on public depositories.
13.) **Disposal considerations**
   Product  
   Dispose in accordance with federal, state and local regulations.

14.) **Transport information**
   Other information  
   The product is not defined under USDOT, IMDG or ICAO/IATA regulations as a hazardous material. Canada: The product is not defined under Transport Dangerous Goods Directorate regulations as a hazardous material.

15.) **Regulatory information**
   **US FEDERAL REGULATIONS**
   Toxic Substances Control Act (TSCA)  
   Is listed on the TSCA inventory.

   Clean Water Act (CWA)  
   None of the ingredients is listed.

   OSHA  
   Following ingredients are Hazardous by definition of Hazard Communication Standard:  
   CAS no. 1333-86-4

   SARA Section 302 (RQ):  
   None of the ingredients is listed.

   SARA 311/312  
   Hazard category Chronic Health Hazard

   SARA Section 313  
   None of the ingredients is listed.

   HAPS Hazardous Air Pollutants  
   None of the ingredients is listed.

   **CARCINOGENICITY**
   IARC  
   Following ingredients are listed in Group 2B:  
   CAS no. 1333-86-4

   **US STATE REGULATIONS**
   New Jersey Worker and Community Right to Know Act.  
   Following ingredients are listed:  
   CAS no. 1333-86-4

   California Proposition 65.  
   Following ingredients are listed:  
   CAS no. 1333-86-4 (Carbon Black)

   Pennsylvania HAZARDOUS SUBSTANCE LIST  
   Following ingredients are listed:  
   CAS no. 1333-86-4

   **CANADA FEDERAL REGULATIONS**
   DSL/NDSL  
   Listed on DSL inventory.

   **WHMIS Classification**  
   This product had been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

   **National Pollutant Release Inventory - Appendix 1**  
   None of the ingredients is listed.

   **National Pollutant Release Inventory - Appendix 2**  
   None of the ingredients is listed.
16.) **Other information**

**Other information**

**Abbreviations:**
- ACGIH American Conference of Governmental Hygienics
- CAS Chemical Abstracts Service
- HAPS Hazardous Air Pollutants
- HMIS Hazardous Material Identification System
- IARC International Agency for Research on Cancer
- IDLH Immediate Dangerous to Life and Health
- LEL Lower Explosion Limit
- NTP National Toxicology Program
- OEL Occupational Exposure Limit
- OSHA Occupational Safety and Health Administration
- PEL Permissible Exposure Limit
- PPE Personal Protection Equipment
- SARA Superfund Amendments and Reauthorization Act
- STEL Short-Term Exposure Level (15 minutes)
- TWA Time-Weighted Average (8 hours)
- UEL Upper Explosion Limit
- VOC Volatile Organic Compounds
- WEEL Workplace Environmental Exposure Level

**Canadian Abbreviations:**
- DSL Domestic Substance List
- NDSL Non-Domestic Substance List
- NPRI National Pollutant Release Inventory
- TDG Transport Dangerous Goods Directorate
- WHMIS Workplace Hazardous Materials Information System

**Department issuing safety data sheet**

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This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.