1. IDENTIFICATION

<table>
<thead>
<tr>
<th>Product identifier</th>
<th>Carbon Black</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Name</td>
<td>Carbon Black</td>
</tr>
<tr>
<td>Other means of identification</td>
<td>908 CARBON BLACK</td>
</tr>
</tbody>
</table>

**Recommended use of the chemical and restrictions on use**
- **Recommended Use**: Restricted to professional users.
- **Uses advised against**: Consumer use

**Details of the supplier of the safety data sheet**
- **Supplier Address**: Solomon Colors, Inc.
- **Address**: 4050 Color Plant Road
- **City**: Springfield
- **State**: IL
- **Zip**: 62702
- **Company Phone Number**: 800-624-0261 (US & Canada); 217-522-3112 (Outside North America)
- **24 Hour Emergency Phone Number**: 800-373-7542

2. HAZARDS IDENTIFICATION

**Classification**
- **OSHA Regulatory Status**: This product is classified as hazardous according to the criteria contained in the Hazard Communication Standard 29 CFR 1910.1200 (known as HCS 2012).

**Combustible dust**

**Label elements**

- **Emergency Overview**
  - **Warning**: May form combustible dust concentrations in air

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Powder</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
</tbody>
</table>

3. COMPOSITION/INFORMATION ON INGREDIENTS

**Common name**: Carbon Black.
Chemical Name | CAS No. | Weight-% | Trade Secret  
---|---|---|---  
Carbon Black | 1333-86-4 | 90-100 | *  

*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

**Description of first aid measures**

**Eye contact**
Rinse thoroughly with plenty of water, also under the eyelids.

**Skin Contact**
Wash off with warm soap and water.

**Inhalation**
Remove to fresh air.

**Ingestion**
Clean mouth with water and drink afterwards plenty of water.

**Most important symptoms and effects, both acute and delayed**

**Symptoms**
Contact with eyes and skin may cause mild, mechanical irritation. Dust may cause irritation of the respiratory tract. See section 8 of this sheet for exposure limits.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians**
Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**
Water spray (fog). Carbon dioxide (CO2). Foam. Dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media**
No information available.

**Specific hazards arising from the chemical**
Risk of ignition should be prevented by avoiding accumulation of dust, e.g. on floors and ledges. Carbon black can burn or smolder at temperatures greater than 400°C (752°F) releasing hazardous thermal decomposition products. At sufficient concentrations carbon monoxide, by itself, or when combined with carbon black can form an explosible hybrid mixture when dispersed in air.

**Hazardous combustion products**
Carbon monoxide. Carbon dioxide (CO2). Oxides of sulfur.

**Explosion data**

- Sensitivity to Mechanical Impact: No information available.
- Sensitivity to Static Discharge: Yes. (as dust).

**Protective equipment and precautions for firefighters**
Wear self-contained breathing apparatus and protective suit.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions**
Use personal protective equipment as required. Avoid sparks, flames, and static electricity discharges in the presence of dust.

**Environmental precautions**
Prevent further leakage or spillage if safe to do so.
Methods and material for containment and cleaning up

Methods for containment
Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.

Methods for cleaning up
Sweep up and shovel into suitable containers for disposal. Avoid creating dust.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Ensure adequate ventilation, especially in confined areas. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials
Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Black</td>
<td>TWA: 3 mg/m³ inhalable particulate matter</td>
<td>TWA: 3.5 mg/m³, (vacated) TWA: 3.5 mg/m³</td>
<td>IDLH: 1750 mg/m³, TWA: 3.5 mg/m³, TWA: 0.1 mg/m³ Carbon black in presence of Polycyclic aromatic hydrocarbons PAH</td>
</tr>
</tbody>
</table>

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information
Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls
Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shields (or goggles).

Skin and body protection
Wear protective gloves and protective clothing.

Respiratory protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Powder</td>
<td>Odorless</td>
</tr>
<tr>
<td>Appearance</td>
<td>Powder</td>
<td>Odor threshold</td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>&gt; 7</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>&gt; 3000 °C / 5432 °F</td>
<td></td>
</tr>
</tbody>
</table>
### 10. STABILITY AND REACTIVITY

#### Reactivity

No data available

#### Chemical stability

Stable under normal conditions.

#### Possibility of Hazardous Reactions

None under normal processing.

**Hazardous polymerization**

Hazardous polymerization does not occur.

#### Conditions to avoid

Heat, flames and sparks.

#### Incompatible materials

Strong oxidizing agents.

#### Hazardous Decomposition Products

Carbon monoxide. Carbon dioxide (CO2). Sulfur oxides.
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information
No acute toxicity information is available for this product. The product is classified based on the mixture components.

Inhalation
May cause irritation of the respiratory tract.

Eye contact
Contact with eyes may cause irritation.

Skin Contact
Prolonged contact may cause redness and irritation.

Ingestion
Do not ingest. If swallowed then seek immediate medical assistance.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Black</td>
<td>&gt; 15400 mg/kg (Rat)</td>
<td>&gt; 3 g/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>1333-86-4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Information on toxicological effects

Symptoms
Contact with eyes and skin may cause mild, mechanical irritation. Dust may cause irritation of the respiratory tract. See section 8 of this sheet for exposure limits.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation
Not classified. (Based on mixture components).

Serious eye damage/eye irritation
Not classified. (Based on mixture components).

Sensitization
Not Classified. This product does not contain known sensitizers at levels > or equal to 0.1%.

Germ cell mutagenicity
Not classified. (Based on mixture components).

Carcinogenicity
Carbon Black - Not a hazardous substance or preparation according to the Global Harmonized System (GHS). In 1995 IARC concluded, “There is inadequate evidence in humans for the carcinogenicity of carbon black.” Based on rat inhalation studies IARC concluded that there is “sufficient evidence in experimental animals for the carcinogenicity of carbon black”. IARC’s overall evaluation was that “Carbon black is possibly carcinogenic to humans (Group 2B).” This conclusion was based on IARC’s guidelines, which require such a classification if one animal species exhibits carcinogenicity in two or more studies. Lung tumors in rats are the result of exposure under “lung overload” conditions. The development of lung tumors in rats is specific to this species. Mouse and hamster showed no carcinogenicity in similar studies. In 2006 IARC re-affirmed its 1995 classification of carbon black as Group 2B (possibly carcinogenic to humans). Overall, as a result of the detailed epidemiological investigations, no causative link between carbon black exposure and cancer risk in humans has been demonstrated. This view is consistent with the IARC evaluation in 2006. Furthermore, several epidemiological and clinical studies of workers in the carbon black production industries show no evidence of clinically significant adverse health effects due to occupational exposure to carbon black. No dose response relationship was observed in workers exposed to carbon black. Applying the rules of the Globally Harmonized System of Classification and Labeling (GHS, e.g. UN ‘Purple Book’, EU CLP Regulation) the results of repeated dose toxicity and carcinogenicity studies in animals do not lead to classification of Carbon Black for Specific Target Organ Toxicity (Repeated exposure) and carcinogenicity. UN GHS says, that even if adverse effects are seen in animal studies or in-vitro tests, no classification is needed if the mechanism or mode of action is not relevant to humans. The European CLP Regulation also mentions, that no classification is indicated if the mechanism is not relevant to humans. Furthermore, the CLP guidance on classification and labeling states, that “lung overload” in animals is listed under mechanism not relevant to humans.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Black</td>
<td>A3</td>
<td>Group 2B</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>1333-86-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

IARC (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Reproductive toxicity
Not Classified. This product does not contain any known or suspected reproductive
Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document.

<table>
<thead>
<tr>
<th>ATEmix (oral)</th>
<th>1328.7 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATEmix (dermal)</td>
<td>3211.8 mg/kg</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Ecotoxicity

This product has not been fully evaluated on the product level.

Persistence and degradability

Not soluble in water. Expected to remain on soil surface. Not expected to degrade.

Bioaccumulation

Bioaccumulation is not expected due to physico-chemical properties of the substance.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

No information available.

US EPA Waste Number

Not applicable

14. TRANSPORT INFORMATION

DOT

Not regulated

TDG

Not regulated

MEX

Not regulated

ICAO (air)

Not regulated

IATA

Not regulated

IMDG

Not regulated

RID

Not regulated

ADR

Not regulated

ADN

Not regulated
15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>Complies</td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td>Complies</td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td>Does not comply</td>
</tr>
<tr>
<td>ENCS</td>
<td>Complies</td>
</tr>
<tr>
<td>IECSC</td>
<td>Complies</td>
</tr>
<tr>
<td>KECL</td>
<td>Complies</td>
</tr>
<tr>
<td>PICCS</td>
<td>Complies</td>
</tr>
<tr>
<td>AICS</td>
<td>Complies</td>
</tr>
</tbody>
</table>

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories
See section 2 for more information

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Proposition 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Black - 1333-86-4</td>
<td>Carcinogen</td>
</tr>
<tr>
<td>Formaldehyde - 50-00-0</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Black</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>1333-86-4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium Sulfate</td>
<td>-</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>7757-82-6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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.

End of Safety Data Sheet