SAFETY DATA SHEET

1. IDENTIFICATION

Product identifier
Product Name  SGS Mortar Colors 80&85

Other means of identification
Product Code  SGS MORTAR COLORS 80,85
Synonyms  SGS 80, 85

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
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 chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

<table>
<thead>
<tr>
<th>Acute toxicity - Oral</th>
<th>No evidence of adverse effects from available data.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Dermal</td>
<td>May cause mechanical irritation, soiling and skin drying. No cases of sensitization in humans have been reported.</td>
</tr>
<tr>
<td>Acute toxicity - Inhalation (Dusts/Mists)</td>
<td>Temporary discomfort to upper respiratory tract may occur due to mechanical irritation when exposures are well above the occupational exposure limit.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>IARC Listed - Group 2B (possibly carcinogenic to humans). Not listed as carcinogenic by NTP, ACGIC, OSHA or in the European Union. There are no known human carcinogenic effects related to the PAH (Polycyclic Aromatic Hydrocarbons) content of Carbon Blacks. Recent research has shown that the PAH content of carbon blacks is not released in the biological fluids and therefore not available for biological activity.</td>
</tr>
</tbody>
</table>

Label elements

Warning
The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance  Powder  Physical state  Powder  Odor  Odorless
Hazards not otherwise classified (HNOC)

Other Information

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Common name** Carbon Black.

**Synonyms** SGS 80, 85.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Iron Oxide</td>
<td>1317-61-9</td>
<td>50-80</td>
<td>*</td>
</tr>
<tr>
<td>Yellow Iron Oxide</td>
<td>51274-00-1</td>
<td>5-20</td>
<td>*</td>
</tr>
<tr>
<td>Red Iron Oxide</td>
<td>1309-37-1</td>
<td>5-20</td>
<td>*</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>1333-86-4</td>
<td>2-10</td>
<td>*</td>
</tr>
</tbody>
</table>

*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 for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin Contact** Wash with soap and water. If skin irritation persists, call a physician.

**Inhalation** Remove to fresh air.

**Ingestion** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth.

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

**Symptoms** No information available.

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

Note to physicians Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media** Carbon dioxide (CO2). Foam. Dry chemical. Water spray (fog).

**Unsuitable extinguishing media** Caution: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**

No information available.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.
Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

<table>
<thead>
<tr>
<th>Personal precautions</th>
<th>Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas.</th>
</tr>
</thead>
</table>

Environmental precautions

<table>
<thead>
<tr>
<th>Environmental precautions</th>
<th>Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional ecological information.</th>
</tr>
</thead>
</table>

Methods and material for containment and cleaning up

<table>
<thead>
<tr>
<th>Methods for containment</th>
<th>Cover powder spill with plastic sheet or tarp to minimize spreading. Vacuum or sweep up material and place in a designated labeled waste container.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methods for cleaning up</td>
<td>Pick up and transfer to properly labeled containers.</td>
</tr>
</tbody>
</table>

7. HANDLING AND STORAGE

Precautions for safe handling

<table>
<thead>
<tr>
<th>Advice on safe handling</th>
<th>Handle in accordance with good industrial hygiene and safety practice.</th>
</tr>
</thead>
</table>

Conditions for safe storage, including any incompatibilities

<table>
<thead>
<tr>
<th>Storage Conditions</th>
<th>Keep containers tightly closed in a dry, cool and well-ventilated place.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incompatible materials</td>
<td>Strong oxidizing agents.</td>
</tr>
</tbody>
</table>
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>Red Iron Oxide 1309-37-1</td>
<td>TWA: 5 mg/m³ respirable fraction</td>
<td>TWA: 10 mg/m³ fume TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 10 mg/m³ fume and total dust Iron oxide (vacated) TWA: 5 mg/m³ respirable fraction regulated under Rouge</td>
<td>IDLH: 2500 mg/m³ Fe dust and fume TWA: 5 mg/m³ Fe dust and fume</td>
</tr>
<tr>
<td>Carbon Black 1333-86-4</td>
<td>TWA: 3 mg/m³ inhalable fraction</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
Showers
Eyewash stations
Ventilation systems.

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

Physical state
Powder

Appearance
Powder

Color
Black

Odor
Odorless

Odor threshold
No information available

Property
Values
Remarks • Method

pH
>7

Melting point/freezing point
N/A

Boiling point / boiling range
N/A

Flash point
N/A

Evaporation rate
N/A

Flammability (solid, gas)
No information available

Flammability Limit in Air

Upper flammability limit:
No information available

Lower flammability limit:
No information available

Vapor pressure
No information available

Vapor density
No information available
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).
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information  No data available

Inhalation  May cause irritation of respiratory tract.

Eye contact  Contact with eyes may cause irritation.

Skin Contact  Prolonged contact may cause redness and irritation.

Ingestion  May cause mechanical irritation.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Iron Oxide</td>
<td>&gt; 10000 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Red Iron Oxide</td>
<td>&gt; 10000 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>&gt; 15400 mg/kg (Rat)</td>
<td>&gt; 3 g/kg (Rabbit)</td>
<td>-</td>
</tr>
</tbody>
</table>

Information on toxicological effects

Symptoms  No information available.

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

Sensitization  Did not cause sensitization on laboratory animals.

Germ cell mutagenicity  None known.

Carcinogenicity  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>Red Iron Oxide</td>
<td>-</td>
<td>Group 3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1309-37-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<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
No information available.
STOT - single exposure
No information available.
STOT - repeated exposure
No information available.
Target Organ Effects
Eyes, Lymphatic System, Respiratory system.
Aspiration hazard
No information available.

Numerical measures of toxicity - Product Information
The following values are calculated based on chapter 3.1 of the GHS document.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Black</td>
<td>-</td>
<td>-</td>
<td>5600: 24 h Daphnia magna mg/L</td>
</tr>
<tr>
<td>1333-86-4</td>
<td>-</td>
<td>-</td>
<td>EC50</td>
</tr>
</tbody>
</table>

Ecotoxicity
Persistence and degradability
No information available.
Bioaccumulation
No information available.

Other adverse effects
No information available.

12. ECOLOGICAL INFORMATION

13. DISPOSAL CONSIDERATIONS

Waste treatment methods
Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging
Do not reuse container.

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

EU - Not defined as a dangerous substance or preparation according to Council Directive 67/548/EEC and its various amendments and adaptations. WHMIS - This material is classified as D2A under the Canadian Worker Hazardous Materials Information System (WHMIS) criteria. OSHA - Classified as hazardous. See 29 CFR 1910.1000, Table Z-1.

International Inventories
TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies
ENCS Complies
IECSC Complies
KECL Complies
PICCS Complies
AICS Complies

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
Acute health hazard No
Chronic Health Hazard No
Fire hazard No
Sudden release of pressure hazard No
Reactive Hazard No

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>
</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>Red Iron Oxide 1309-37-1</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Carbon Black 1333-86-4</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Reactivity</th>
<th>0</th>
<th>Physical and Chemical Properties</th>
<th>HMIS</th>
<th>Health hazards</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>0</td>
<td>Physical hazards</td>
<td>0</td>
<td>Personal protection</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Issue Date: 19-May-2015
Revision Date: 19-May-2015
Revision Note: No information available

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