1. Identification

Product name: Sikadur®-509 Coarse Broadcast Aggregate

Supplier: Sika Corporation
201 Polito Avenue
Lyndhurst, NJ 07071
USA
www.sikausa.com

Telephone: (201) 933-8800
Telefax: (201) 804-1076
E-mail address: ehs@sika-corp.com

Emergency telephone: CHEMTREC: 800-424-9300
INTERNATIONAL: 703-527-3887

Recommended use of the chemical and restrictions on use: For further information, refer to product data sheet.

2. Hazards identification

GHS Classification

Carcinogenicity, Category 1A (Inhalation) H350i: May cause cancer by inhalation.
Specific target organ systemic toxicity - single exposure, Category 3, Respiratory system H335: May cause respiratory irritation.

Specific target organ systemic toxicity - repeated exposure, Category 1, Lungs H372: Causes damage to organs through prolonged or repeated exposure.

GHS label elements

Hazard pictograms: 

Signal Word: Danger

Hazard Statements: H335 May cause respiratory irritation.
H350i May cause cancer by inhalation.
H372 Causes damage to organs (Lungs) through prolonged or repeated exposure.

Precautionary Statements: Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P281 Use personal protective equipment as required.

Response:
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308 + P313 IF exposed or concerned: Get medical advice/attention.

Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

See Section 11 for more detailed information on health effects and symptoms.
There are no hazards not otherwise classified that have been identified during the classification process.
There are no ingredients with unknown acute toxicity used in a mixture at a concentration >= 1%.

3. Composition/information on ingredients

Hazardous ingredients

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz (SiO2)</td>
<td>14808-60-7</td>
<td>&gt;= 50 - &lt;= 100 %</td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

If inhaled:
- Move to fresh air.
- Consult a physician after significant exposure.

In case of skin contact:
- Take off contaminated clothing and shoes immediately.
- Wash off with soap and plenty of water.
- If symptoms persist, call a physician.

In case of eye contact:
- Remove contact lenses.
- Keep eye wide open while rinsing.
- If eye irritation persists, consult a specialist.

If swallowed:
- Clean mouth with water and drink afterwards plenty of water.
- Do not induce vomiting without medical advice.
- Do not give milk or alcoholic beverages.
- Never give anything by mouth to an unconscious person.

Most important symptoms:
- IRRITANT EFFECTS
and effects, both acute and delayed carcinogenic effects

Prolonged exposure can cause silicosis.

Cough
Respiratory disorder
See Section 11 for more detailed information on health effects and symptoms.

May cause respiratory irritation.
May cause cancer by inhalation.
Causes damage to organs through prolonged or repeated exposure.

Protection of first-aiders

: Move out of dangerous area.
Consult a physician.
Show this material safety data sheet to the doctor in attendance.

Notes to physician

: Treat symptomatically.

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5. Fire-fighting measures

Suitable extinguishing media

: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific extinguishing methods

: Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for fire-fighters

: In the event of fire, wear self-contained breathing apparatus.

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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

: Use personal protective equipment.
Avoid breathing dust.
Deny access to unprotected persons.

Environmental precautions

: Do not flush into surface water or sanitary sewer system.
If the product contaminates rivers and lakes or drains inform respective authorities.
Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up

: Pick up and arrange disposal without creating dust.
Keep in suitable, closed containers for disposal.

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7. Handling and storage

Advice on safe handling

: Avoid formation of respirable particles.
Avoid exceeding the given occupational exposure limits (see section 8).
Do not get in eyes, on skin, or on clothing.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Follow standard hygiene measures when handling chemical products.

Conditions for safe storage:
- Prevent unauthorized access.
- Store in original container.
- Keep in a well-ventilated place.
- Observe label precautions.
- Store in accordance with local regulations.

Materials to avoid:
- No data available

8. Exposure controls/personal protection

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Basis **</th>
<th>Value</th>
<th>Exposure limit(s)* / Form of exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz (SiO2)</td>
<td>14808-60-7</td>
<td>OSHA Z-3</td>
<td>TWA</td>
<td>10 mg/m3 / %SiO2+2 respirable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA Z-3</td>
<td>TWA</td>
<td>250 mppcf / %SiO2+5 respirable</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA P0</td>
<td>TWA</td>
<td>0.1 mg/m3 Respirable fraction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>TWA</td>
<td>0.025 mg/m3 Respirable fraction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA Z-1</td>
<td>TWA</td>
<td>0.05 mg/m3 Respirable dust</td>
</tr>
<tr>
<td>aluminium oxide (Fr = 100%)</td>
<td>1344-28-1</td>
<td>OSHA P0</td>
<td>TWA</td>
<td>10 mg/m3 Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA P0</td>
<td>TWA</td>
<td>5 mg/m3 Respirable fraction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA Z-1</td>
<td>TWA</td>
<td>15 mg/m3 total dust</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA Z-1</td>
<td>TWA</td>
<td>5 mg/m3 respirable fraction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>TWA</td>
<td>1 mg/m3 Respirable fraction</td>
</tr>
</tbody>
</table>
OSHA P0  |  TWA  |  10 mg/m3  
|--------|------|------------|
| OSHA P0  |  TWA  |  5 mg/m3  
|         |       | respirable dust fraction |

*The above mentioned values are in accordance with the legislation in effect at the date of the release of this safety data sheet.

**Basis**
ACGIH. Threshold Limit Values (TLV)
OSHA P0. Table Z-1, Limit for Air Contaminant (1989 Vacated Values)
OSHA P1. Permissible Exposure Limits (PEL), Table Z-1, Limit for Air Contaminant
OSHA P2. Permissible Exposure Limits (PEL), Table Z-2
OSHA Z3. Table Z-3, Mineral Dust

**Engineering measures**
Use of adequate ventilation should be sufficient to control worker exposure to airborne contaminants. If the use of this product generates dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

**Personal protective equipment**

Respiratory protection
- Use a properly fitted NIOSH approved air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.
  - The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.

Hand protection

Eye protection
- Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary.

Skin and body protection
- Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Hygiene measures
- Avoid contact with skin, eyes and clothing.
  - Wash hands before breaks and immediately after handling the product.
  - Remove contaminated clothing and protective equipment before entering eating areas.
  - Avoid breathing dust.
### 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>granular powder</td>
</tr>
<tr>
<td>Color</td>
<td>tan, gray, white</td>
</tr>
<tr>
<td>Odor</td>
<td>odorless</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Note: Not applicable</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower explosion limit (Vol%)</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper explosion limit (Vol%)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>6 - 8</td>
</tr>
<tr>
<td>Melting point/range</td>
<td>3,110 °F (1,710 °C)</td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>4,046 °F (2,230 °C)</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>2.65 g/cm³</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Note: negligible</td>
</tr>
</tbody>
</table>
| Partition coefficient: n-octanol/water | No data available |}
| Viscosity, dynamic              | No data available                          |
| Viscosity, kinematic            | Note: Not applicable                       |
| Relative vapor density          | No data available                          |
| Evaporation rate                | No data available                          |
| Burning rate                    | No data available                          |
| Volatile organic compounds (VOC) content | Not applicable |
10. Stability and reactivity

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical stability: The product is chemically stable.

Possibility of hazardous reactions:
- Stable under recommended storage conditions.
- Conditions to avoid: No data available
- Incompatible materials: No data available

11. Toxicological information

Acute toxicity
Not classified based on available information.

Skin corrosion/irritation
Not classified based on available information.

Serious eye damage/eye irritation
Not classified based on available information.

Respiratory or skin sensitization
Skin sensitization: Not classified based on available information.
Respiratory sensitization: Not classified based on available information.

Germ cell mutagenicity
Not classified based on available information.

Reproductive toxicity
Not classified based on available information.

STOT-single exposure
May cause respiratory irritation.

STOT-repeated exposure
Causes damage to organs (Lungs) through prolonged or repeated exposure.
Prolonged exposure can cause silicosis.

Aspiration toxicity
Not classified based on available information.

Carcinogenicity
May cause cancer by inhalation.

IARC
- Group 1: Carcinogenic to humans
  - Quartz (SiO2) 14808-60-7

NTP
- Known to be human carcinogen
  - Quartz (SiO2) 14808-60-7

12. Ecological information
13. Disposal considerations

Disposal methods
Waste from residues: Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT
Not dangerous goods

IATA
Not dangerous goods

IMDG
Not dangerous goods

Special precautions for user
No data available

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable

15. Regulatory information

TSCA list
All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity
This material does not contain any components with a CERCLA RQ.

SARA304 Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards
Carcinogenicity
Specific target organ toxicity (single or repeated exposure)
SARA 302: This material does not contain any components with a section 302 EHS TPQ.

SARA 313: The following components are subject to reporting levels established by SARA Title III, Section 313:
- aluminium oxide (Fr = 100%)

Clean Air Act

Ozone-Depletion Potential: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).


16. Other information

HMIS Classification

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical Hazard</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>* 3</td>
<td>0</td>
<td>0</td>
<td>x</td>
</tr>
</tbody>
</table>

Caution: HMIS® rating is based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® rating is not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® rating is to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). Please note HMIS® attempts to convey full health warning information to all employees.

Notes to Reader

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