

1. Identification

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|---|---|
| Product identifier | HES Aggregate G |
| Other means of identification | None. |
| Recommended use | Not available. |
| Recommended restrictions | None known. |
| Manufacturer/Importer/Supplier/Distributor information | |
| Company Name | ErgonArmor, a division of Ergon Asphalt & Emulsions, Inc. |
| Address | 2829 Lakeland Drive Jackson, MS 39232 USA |
| After hours telephone number | 1-800-222-7122 |
| Normal work hours telephone number | 1-877-982-7667 |
| Website | www.ergonarmor.com |
| E-mail | sds@ergon.com |
| Emergency 24-hour telephone number | CHEMTREC: North America 1-800-424-9300 International 1-800-527-3887 |
| Information on operation hours | 8:00 a.m. to 5:00 p.m. |

2. Hazard(s) identification

| | | |
|------------------------------|---|---|
| Physical hazards | Not classified. | |
| Health hazards | Carcinogenicity | Category 1A |
| | Specific target organ toxicity, single exposure | Category 3 respiratory tract irritation |
| | Specific target organ toxicity, repeated exposure | Category 1 |
| Environmental hazards | Not classified. | |
| OSHA defined hazards | Not classified. | |
| Label elements | | |



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| Signal word | Danger |
| Hazard statement | May cause cancer by inhalation. May cause respiratory irritation. Causes damage to organs through prolonged or repeated exposure. |
| Precautionary statement | |
| Prevention | Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. |
| Response | IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. IF exposed or concerned: Get medical advice/attention. Get medical advice/attention if you feel unwell. Call a POISON CENTER/doctor if you feel unwell. |
| Storage | Store in a well-ventilated place. Keep container tightly closed. Store locked up. |
| Disposal | Dispose of contents/container in accordance with local/regional/national/international regulations. |
| Hazard(s) not otherwise classified (HNOC) | None known. |

Supplemental information None.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|----------------------|---------------------------------|-------------------|----------|
| QUARTZ | | 14808-60-7 | 100 |

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

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| Inhalation | Move to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. If breathing is difficult, give oxygen. Get medical attention. |
| Skin contact | In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if symptoms occur. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes. |
| Eye contact | In case of contact, immediately flush eyes with large amounts of water, continuing to flush for 15 minutes. Get medical attention. |
| Ingestion | Do not induce vomiting without advice from poison control center. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention. |
| Most important symptoms/effects, acute and delayed | Not available. |
| Indication of immediate medical attention and special treatment needed | In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed. |
| General information | IF exposed or concerned: Get medical advice/attention. Keep victim warm. Keep victim under observation. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. |

5. Fire-fighting measures

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| Suitable extinguishing media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable extinguishing media | Not available. |
| Specific hazards arising from the chemical | Not applicable. |
| Special protective equipment and precautions for firefighters | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. |
| Fire fighting equipment/instructions | In the event of fire, cool tanks with water spray. |
| Specific methods | Cool containers exposed to flames with water until well after the fire is out. |

6. Accidental release measures

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| Personal precautions, protective equipment and emergency procedures | Wear appropriate protective equipment and clothing during clean-up. |
| Methods and materials for containment and cleaning up | Not available. |
| Environmental precautions | Not available. |

7. Handling and storage

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| Precautions for safe handling | Do not breathe dust. Do not get in eyes, on skin, on clothing. Use only with adequate ventilation. |
| Conditions for safe storage, including any incompatibilities | Keep container tightly closed. Keep out of reach of children. Store in a cool, dry place. Use care in handling/storage. |

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components | Type | Value | Form |
|-------------------------|------|------------------------|------------------|
| QUARTZ (CAS 14808-60-7) | PEL | 0.05 mg/m ³ | Respirable dust. |

US. OSHA Table Z-3 (29 CFR 1910.1000)

| Material | Type | Value | Form |
|-----------------|------|-----------------------|-------------|
| HES Aggregate G | TWA | 0.3 mg/m ³ | Total dust. |
| | | 0.1 mg/m ³ | Respirable. |
| | | 2.4 mppcf | Respirable. |

| Components | Type | Value | Form |
|-------------------------|------|-----------------------|-------------|
| QUARTZ (CAS 14808-60-7) | TWA | 0.1 mg/m ³ | Respirable. |
| | | 2.4 mppcf | Respirable. |

US. ACGIH Threshold Limit Values

| Material | Type | Value | Form |
|-----------------|------|-------------------------|----------------------|
| HES Aggregate G | TWA | 0.025 mg/m ³ | Respirable fraction. |

| Components | Type | Value | Form |
|-------------------------|------|-------------------------|----------------------|
| QUARTZ (CAS 14808-60-7) | TWA | 0.025 mg/m ³ | Respirable fraction. |

US. NIOSH: Pocket Guide to Chemical Hazards

| Material | Type | Value | Form |
|-----------------|------|------------------------|------------------|
| HES Aggregate G | TWA | 0.05 mg/m ³ | Respirable dust. |

| Components | Type | Value | Form |
|-------------------------|------|------------------------|------------------|
| QUARTZ (CAS 14808-60-7) | TWA | 0.05 mg/m ³ | Respirable dust. |

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

Appropriate engineering controls

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear dust-resistant safety goggles where there is danger of eye contact.

Skin protection

Hand protection

Wear protective gloves.

Other

It is a good industrial hygiene practice to minimize skin contact. Wear appropriate clothing to prevent any possibility of skin contact.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Thermal hazards

Not available.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state

Solid.

Form

Crystalline powder.

Color

Natural color.

Odor

Not available.

Odor threshold

Not available.

pH

Not available.

Melting point/freezing point

3110 °F (1710 °C)

| | |
|---|--------------------------|
| Initial boiling point and boiling range | 4046 °F (2230 °C) |
| Flash point | Not available. |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not available. |
| Upper/lower flammability or explosive limits | |
| Flammability limit - lower (%) | Not available. |
| Flammability limit - upper (%) | Not available. |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | < 0.0000001 kPa at 25 °C |
| Vapor density | Not available. |
| Relative density | 2.65 estimated |
| Solubility(ies) | |
| Solubility (water) | Insoluble |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Other information | |
| Molecular formula | O2Si |

10. Stability and reactivity

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|---|---|
| Reactivity | Not available. |
| Chemical stability | Material is stable under normal conditions. |
| Possibility of hazardous reactions | Not available. |
| Conditions to avoid | None under normal conditions. |
| Incompatible materials | Strong oxidizing agents. Strong bases. |
| Hazardous decomposition products | Oxides of silicon. |

11. Toxicological information

Information on likely routes of exposure

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|---------------------|---|
| Inhalation | May cause cancer by inhalation. |
| Skin contact | May be irritating to the skin. |
| Eye contact | Harmful in contact with eyes. |
| Ingestion | May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure. |

Symptoms related to the physical, chemical and toxicological characteristics Not available.

Information on toxicological effects

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|--|-------------------------------|
| Acute toxicity | Not available. |
| Skin corrosion/irritation | Not available. |
| Serious eye damage/eye irritation | Harmful in contact with eyes. |

Respiratory or skin sensitization

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|----------------------------------|----------------|
| Respiratory sensitization | Not available. |
|----------------------------------|----------------|

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| Skin sensitization | None known. |
| Germ cell mutagenicity | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
| Carcinogenicity | Hazardous by OSHA criteria. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled. In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) |
| IARC Monographs. Overall Evaluation of Carcinogenicity | |
| QUARTZ (CAS 14808-60-7) | 1 Carcinogenic to humans. |
| OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052) | |
| QUARTZ (CAS 14808-60-7) | Cancer |
| US. National Toxicology Program (NTP) Report on Carcinogens | |
| QUARTZ (CAS 14808-60-7) | Known To Be Human Carcinogen. |
| Reproductive toxicity | Not classified. |
| Specific target organ toxicity - single exposure | May cause irritation to the respiratory system. |
| Specific target organ toxicity - repeated exposure | Causes damage to the following organs through prolonged or repeated exposure: Respiratory organs. |
| Aspiration hazard | Not available. |
| Chronic effects | Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects |
| Further information | This product has no known adverse effect on human health. |

12. Ecological information

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| Ecotoxicity | Not expected to be harmful to aquatic organisms. |
| Persistence and degradability | Not available. |
| Bioaccumulative potential | Not available. |
| Mobility in soil | Not available. |
| Other adverse effects | Not available. |

13. Disposal considerations

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| Disposal instructions | Dispose in accordance with all applicable regulations. |
| Waste from residues / unused products | Not available. |
| Contaminated packaging | Not available. |

14. Transport information

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|---|-----------------------------------|
| DOT | Not regulated as dangerous goods. |
| IATA | Not regulated as dangerous goods. |
| IMDG | Not regulated as dangerous goods. |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not available. |

15. Regulatory information

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| US federal regulations | This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List. |
| TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) | |
| Not regulated. | |

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

QUARTZ (CAS 14808-60-7)

Cancer
lung effects
immune system effects
kidney effects**Superfund Amendments and Reauthorization Act of 1986 (SARA)****SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Yes**Hazardous chemical****Classified hazard categories** Carcinogenicity
Specific target organ toxicity (single or repeated exposure)**SARA 313 (TRI reporting)**

Not regulated.

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.**US state regulations**

WARNING: This product contains a chemical known to the State of California to cause cancer.

California Proposition 65**California Proposition 65 - CRT: Listed date/Carcinogenic substance**

QUARTZ (CAS 14808-60-7)

Listed: October 1, 1988

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

QUARTZ (CAS 14808-60-7)

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | Yes |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| Taiwan | Taiwan Chemical Substance Inventory (TCSI) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision**Issue date** 02-26-2016

| | |
|-----------------------------|---|
| Revision date | 08-21-2019 |
| Version # | 02 |
| Further information | HMIS® is a registered trade and service mark of the NPCA. |
| NFPA ratings | Health: 2 Flammability: 0 Instability: 0 |
| References | ACGIH EPA: AQUIRE database NLM: Hazardous Substances Data Base US. IARC Monographs on Occupational Exposures to Chemical Agents HSDB® - Hazardous Substances Data Bank IARC Monographs. Overall Evaluation of Carcinogenicity National Toxicology Program (NTP) Report on Carcinogens ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices |
| Disclaimer | 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. |
| Revision information | Hazard(s) identification: Response Hazard(s) identification: Prevention Hazard(s) identification: Hazard statement Hazard(s) identification: GHS Symbols First-aid measures: Skin contact Toxicological information: Eye contact Toxicological information: Ingestion Toxicological information: Skin contact GHS: Classification |