1. Product and Company Identification

Trade Name: HDM®
Product Code: HDM
Product Description: High Density Material
CAS Number: 7439-89-6
Manufacturer Information: Chesapeake Specialty Products, Inc.,
5055 North Point Boulevard, Baltimore, MD 21219
Business Telephone: {410} 388-5055
Emergency Number Contact: {888} 758-6250

2. Hazard(s) Identification

Physical hazards: Not classified.
Health hazards: Not classified.
Environmental hazards: Not classified.
OSHA defined hazards: Particulates Not Otherwise Regulated (PNOR)
Inert or Nuisance Dust:

<table>
<thead>
<tr>
<th></th>
<th>mppcf (f)</th>
<th>mg/m3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respirable fraction</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Total Dust</td>
<td>50</td>
<td>15</td>
</tr>
</tbody>
</table>

Hazard symbol: None.
Signal word: None.
Hazard statement: The mixture does not meet the criteria for classification.
Precautionary statement:
- Prevention: Observe good industrial hygiene practices.
- Response: Wash hands after handling.
- Storage: Store away from incompatible materials.
- Disposal: Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC): None known.
Supplemental information: Not applicable.
3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Chemical Symbol</th>
<th>CAS Number</th>
<th>% Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron</td>
<td>Fe</td>
<td>7439-89-6</td>
<td>&gt; 80</td>
</tr>
<tr>
<td>Carbon</td>
<td>C</td>
<td>7440-44-0</td>
<td>&lt;2</td>
</tr>
<tr>
<td>Manganese</td>
<td>Mn</td>
<td>7439-96-5</td>
<td>&lt;0.5</td>
</tr>
</tbody>
</table>

4. First Aid Measures

Inhalation: Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact: Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact: Rinse with water. Get medical attention if irritation develops and persists.
Ingestion: Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/ effects, acute and delayed:
Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special treatment needed:
Treat symptomatically.

General information:
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Firefighting Measures

Suitable extinguishing media:

Specific hazards arising from the chemical:
No further relevant information available.

Special protective equipment and precautions for firefighters:
No special measures required.

6. Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures:
Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.

Methods and materials for containment and clean up:
Stop the flow of material, if this is without risk. Following product recovery, flush area.
with water.

For waste disposal, see section 13 of the SDS.

Environmental precautions:

Avoid discharge into drains, water courses, or into the ground.

**7. Handling and Storage**

Precautions for safe handling:

Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities:

Store in original, tightly closed container.

Store away from incompatible materials (see Section 10 of the SDS).

**8. Exposure Controls/Personal Protection**

Occupational exposure limits:

<table>
<thead>
<tr>
<th>Particulates Not Otherwise Regulated (PNOR)</th>
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Biological limit values: No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls:

Good general ventilation (typically 10 air changes per hour) should be used.

Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Individual protection measures, such as personal protective equipment.

Eye/Face protection: If contact is likely, safety glasses with side shields are recommended.

Skin protection: For prolonged or repeated skin contact, use suitable protective gloves.

Other personal protective equipment needed:

Respiratory protection in case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards: Wear appropriate thermal protective clothing when necessary.

General hygiene considerations:

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

Work/Hygiene considerations:

Employees should wash their hands and face before eating, drinking, or using...
9. Physical and Chemical Properties

Information on basic physical and chemical properties:
Appearance:
   Form: Metallic particles
   Color: Black/Grey
Upper/lower flammability or explosive limits:
   Not applicable
Odor:
   Odorless
Odor Threshold:
   Not applicable
Vapor Density:
   Not applicable
Vapor Pressure (mm Hg.)
   32
pH:
   5.9 using analytical method EPA 150.1.
Relative Density Specific Gravity (g/ml):
   7.0 @ 20° C
Change in condition:
   Boiling Point:
   Not applicable
   Freezing Point:
   Not applicable
   Melting Point:
   Greater than 1000° C (3500° F)
Partition coefficient (n-octanol/water):
   Not applicable
Solubility in water:
   Insoluble
Flash point:
   Not applicable
Evaporation rate:
   Not applicable
Auto ignition temperature:
   Not applicable
Bulk density (kg/m³):
   3.6-4.5 g/cm³ @ 20° C
Particle size (microns):
   150-1700
Decomposition temperature:
   Not applicable
Volatile organic compounds (VOC):
   None
Viscosity:
   Not available

10. Stability and Reactivity
Reactivity: The product is stable and non-reactive under normal conditions of use, storage, and transport.

Chemical stability: Material is stable under normal conditions.

Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.

Conditions to avoid: Contact with incompatible materials.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: No hazardous decomposition products are known.

### 11. Toxicology Information

Information on likely routes of exposure:

- **Ingestion:** Expected to be a low ingestion hazard.
- **Inhalation:** No adverse effects due to inhalation are expected.
- **Skin contact:** No adverse effects due to skin contact are expected.
- **Eye contact:** Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical, and toxicological characteristics:

- Direct contact with eyes may cause temporary irritation.

Information on toxicological effects:

- **Acute toxicity:** Not available.
- **Skin corrosion/irritation:** Prolonged skin contact may cause temporary irritation.
- **Serious eye damage/eye irritation:** Direct contact with eyes may cause temporary irritation.
- **Respiratory or skin sensitization:** Respiratory sensitization: Not available
  - Skin sensitization: This product is not expected to cause skin sensitization.

**Germ cell mutagenicity:** No data available to indicate product or any components present at greater than 0.1% are mutagenic or geno toxic.

**Carcinogenicity:** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not listed.

**Reproductive toxicity:** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity- single exposure:** Not classified.

**Specific target organ toxicity- repeated exposure:** Not classified.

_SDS HDM®- 2020_
Aspiration hazard: Not available.

12. Ecological Information (non-mandatory)

Ecotoxicity: This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability:
No data is available on the degradability of this product.

Bio-accumulative potential:
No data available.

Mobility in soil:
No data available.

Other adverse effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal Considerations (non-mandatory)

Disposal instructions: Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations:
Dispose in accordance with all applicable regulations.

Hazardous waste code: The waste code should be assigned in discussion between the user, the producer, and the waste disposal company.

Waste from residues/unused products:
Dispose of in accordance with local regulations.
Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see Disposal instructions).

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

14. Transport Information (non-mandatory)
No data.

15. Regulatory Information (non-mandatory)
No data.

16. Other Information
No data.
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