SECTION 1
PRODUCT AND COMPANY IDENTIFICATION

Product Name: Duro-Shield™ Silicone
Version: 2
Identifier 1: Silicone Roof Coating
Identifier 2: 4194, 4195, 4196, 1G, 5G, 55G
Chemical Family: Mixture
Product Use: Reflective Roof Coating

Company Information: Duro-Last®, Inc.
525 W Morley Dr.
Saginaw, MI 48601
Phone: (800) 248-0280
Website: www.duro-last.com

Emergency Phone (24 hours): INFOTRAC
1-800-535-5053 (US & Canada)
1-352-323-3500 (International)

SECTION 2
HAZARD(S) IDENTIFICATION

Hazard Classification: Health Hazards
Carcinogenicity, Category 1A

Pictogram(s):

Signal Word: DANGER

Hazard Statements: H350 - May cause cancer.

Precautionary Statements:
Prevention
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P281 - Use personal protective equipment as required.

Response
P308+P315 - IF EXPOSED OR CONCERNED: Get medical advice/attention.

Storage
P405 - Store locked up.

Disposal
P501 - Dispose of contents/container to an approved waste disposal plant.
Other Information: Unknown Acute Toxicity:
- 100% of the mixture consists of ingredient(s) of unknown toxicity.

**SECTION 3**

COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Concentration (%)</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Siloxane, Hydroxy-Terminated</td>
<td>70131-67-8</td>
<td>50 – 60%</td>
<td>*</td>
</tr>
<tr>
<td>Silica, Quartz</td>
<td>14808-60-7</td>
<td>30 – 40%</td>
<td>*</td>
</tr>
<tr>
<td>Titanium Dioxide</td>
<td>13463-67-7</td>
<td>0 – 10%</td>
<td>*</td>
</tr>
<tr>
<td>Vinyltrimethoxysilane</td>
<td>2768-02-7</td>
<td>0 – 10%</td>
<td>*</td>
</tr>
<tr>
<td>Methyl Tris (MEKO) Silane</td>
<td>22984-54-9</td>
<td>0 – 10%</td>
<td>*</td>
</tr>
</tbody>
</table>

*The hazards of the listed Titanium Dioxide and Silica, Quartz are for their powder unbound forms. When the chemicals are used in applications such as textures or coatings, the chemicals become bound and are not in their hazardous forms.*

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.

**SECTION 4**

FIRST-AID MEASURES

**Inhalation:** If affected, move to fresh air.

**Skin Contact:** Wash skin with soap and water.

**Eye Contact:** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

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

**Most Important Symptoms and Effects, Both Acute and Delayed:** No information available.

**Protection of First-Aiders:** No information available.

**Notes to Physician:** Treat symptomatically.

**SECTION 5**

FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media:** Water.

**Specific Hazards Arising from the Chemical:** No information available.

**Special Protective Equipment for Fire-Fighters:** As in any fire, wear a self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
SECTION 6  
ACCIDENTAL RELEASE MEASURES

Handling Precautions: Ensure adequate ventilation, especially in confined areas.

Environmental Precautions: See Section 12 for additional ecological information.

Cleanup: Prevent further leakage or spillage if safe to do so. Soak up with inert absorbent material. Pick up the absorbent material and transfer to properly labeled containers for disposal according to federal, state, and local laws and regulations (See Section 13).

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1940.120).

SECTION 7  
HANDLING AND STORAGE

Handling Precautions: Handle in accordance with good industrial hygiene and safety practice.

Storage Requirements: Keep containers tightly closed in a dry, cool and well-ventilated place. No known incompatible materials based on information supplied.

SECTION 8  
EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Number</th>
<th>Basis</th>
<th>Value</th>
<th>Exposure Limit(s)* / Form of Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica, Quartz**</td>
<td>14808-60-7</td>
<td>ACGIH TLV TWA</td>
<td>0.025 mg/m3 respirable particulate matter</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL TWA</td>
<td>50 µg/m3 excludes construction work, agricultural operations, and exposures that result from the processing of sorptive clays (vacated); 0.1 mg/m3 respirable dust; (250)/(%SiO2 + 5) mppcf TWA respirable fraction; (10)/(%SiO2 + 2) mg/m3 TWA respirable fraction.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH IDLH IDLH</td>
<td>50 mg/m3 respirable dust</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH IDLH TWA</td>
<td>0.05 mg/m3 respirable dust</td>
<td></td>
</tr>
<tr>
<td>Titanium Dioxide**</td>
<td>13463-67-7</td>
<td>ACGIH TLV TWA</td>
<td>10 mg/m3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL TWA</td>
<td>15 mg/m3 total dust (vacated); 10 mg/m3 total dust</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH IDLH IDLH</td>
<td>5000 mg/m3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH IDLH TWA</td>
<td>2.4 mg/m3 CIB 63 fine; 0.3 mg/m3 CIB 63 ultrafine, including engineered nanoscale</td>
<td></td>
</tr>
</tbody>
</table>

*The above mentioned values are in accordance with the legislation in effect at the date of the release of this Safety Data Sheet.

**The hazards of the listed Titanium Dioxide and Silica, Quartz are for their powder unbound forms. When the chemicals are used in applications such as textures or coatings, the chemicals become bound and are not in their hazardous forms.

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. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits.

Worksites should also have accessible showers and eyewash stations in case of emergency.
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
Gloves complying with an approved standard should be worn if a risk assessment indicates this is necessary.

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 workplace.

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

SECTION 9
PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State:</td>
<td>Liquid</td>
</tr>
<tr>
<td>pH:</td>
<td>N/A</td>
</tr>
<tr>
<td>Color:</td>
<td>N/A</td>
</tr>
<tr>
<td>Relative Density:</td>
<td>N/A</td>
</tr>
<tr>
<td>pH:</td>
<td>N/A</td>
</tr>
<tr>
<td>Odor:</td>
<td>Peppermint</td>
</tr>
<tr>
<td>Solubility:</td>
<td>N/A</td>
</tr>
<tr>
<td>Flash Point:</td>
<td>&gt;100 &gt;212</td>
</tr>
<tr>
<td>Boiling Point/Range:</td>
<td>&gt;100 &gt;212</td>
</tr>
<tr>
<td>VOC:</td>
<td>N/A</td>
</tr>
<tr>
<td>Flammability Limit in Air:</td>
<td>Non-Flammable</td>
</tr>
<tr>
<td>Molecular Weight:</td>
<td>&lt;25</td>
</tr>
<tr>
<td>Density:</td>
<td>11.5</td>
</tr>
<tr>
<td>Softening Point:</td>
<td>N/A</td>
</tr>
<tr>
<td>Bulk Density:</td>
<td>N/A</td>
</tr>
<tr>
<td>Oxidizing Properties:</td>
<td>N/A</td>
</tr>
<tr>
<td>Remarks:</td>
<td>For exterior use only. Do not use indoors.</td>
</tr>
</tbody>
</table>

SECTION 10
STABILITY AND REACTIVITY

Reactivity: No data available.

Chemical Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: None under normal processing.

Conditions to Avoid: Extremes of temperature and direct sunlight.
Incompatible Materials: None known based on information supplied.

Hazardous Decomposition Products: None known based on information supplied.

SECTION 11

Likely Routes of Exposure:

- Inhalation: No data available.
- Eye Contact: No data available.
- Skin Contact: No data available.
- Ingestion: No data available.

Toxicological Effects:

- Symptoms: No information available.

Toxicity

<table>
<thead>
<tr>
<th>Hazardous Ingredient Name</th>
<th>CAS Number</th>
<th>Oral LD$_{50}$</th>
<th>Dermal LD$_{50}$</th>
<th>Inhalation LC$_{50}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Siloxane, Hydroxy-Terminated</td>
<td>70131-67-8</td>
<td>$&gt;15400$ mg/kg (Rat)</td>
<td>$&gt;16$ mL/kg (Rabbit)</td>
<td>$&gt;8750$ mg/m$^3$ (Rat) 7h</td>
</tr>
<tr>
<td>Titanium Dioxide*</td>
<td>13463-67-7</td>
<td>$&gt;10000$ mg/kg (Rat)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Vinyltrimethoxysilane</td>
<td>2768-02-7</td>
<td>$=7340$ µL/kg (Rat)</td>
<td>$=3360$ µL/kg (Rabbit)</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*The hazards of the listed Titanium Dioxide are for its powder unbound form. When the chemical is used in applications such as textures or coatings, the chemical becomes bound and is not in its hazardous form.

Delayed And Immediate Effects As Well As Chronic Effects From Short And Long-Term Exposure:

- Sensitization: No information available.
- Germ Cell Mutagenicity: No information available.
- Carcinogenicity: The table below indicates whether each agency (ACGIH, IARC, NTP, or OSHA) has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica, Quartz (14808-60-7)</td>
<td>A2</td>
<td>Group 1</td>
<td>Known</td>
<td>X</td>
</tr>
<tr>
<td>Titanium Dioxide (13463-67-7)</td>
<td>-</td>
<td>Group 2B</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

- Reproductive Toxicity: No information available.
- STOT – Single Exposure: No information available.
- STOT – Repeated Exposure: No information available.
- Aspiration Hazard: No information available.
Numerical Measures of Toxicity – Product Information

ATEmix (Oral): 14,434.30*

ATEmix (Dermal): 14,869.73*

*These values are calculated based on chapter 3.1 of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) document.

For exterior use only. Do not use indoors.

SECTION 12  ECOLOGICAL INFORMATION

Ecotoxicity: 12% of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Persistence and Degradability: No information available.

Bioaccumulation: No information available.

Other Information: No information available.

SECTION 13  DISPOSAL CONSIDERATIONS

Waste Treatment Methods:

Disposal of Wastes: Disposal should be in accordance with applicable federal, state, and local laws and regulations.

Contaminated Packaging: Do not reuse container.

SECTION 14  TRANSPORT INFORMATION

DOT: Not Regulated  ICAO (air): Not Regulated

IATA: Not Regulated  RID: Not Regulated

IMDG: Not Regulated  ADR: Not Regulated

TDG: Not Regulated  ADN: Not Regulated

MEX: Not Regulated

SECTION 15  REGULATORY INFORMATION

International Inventories Legend:

<table>
<thead>
<tr>
<th>Legend</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>United States Toxic Substances Control Act Section 8(b) Inventory</td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td>Canadian Domestic Substances List/ Non-Domestic Substances List</td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td>European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances</td>
</tr>
<tr>
<td>ENCS</td>
<td>Japan Existing and New Chemical Substances</td>
</tr>
<tr>
<td>IECSC</td>
<td>China Inventory of Existing Chemical Substances</td>
</tr>
<tr>
<td>KECL</td>
<td>Korean Existing and Evaluated Chemical Substances</td>
</tr>
<tr>
<td>PICCS</td>
<td>Philippines Inventory of Chemicals and Chemical Substances</td>
</tr>
<tr>
<td>AICS</td>
<td>Australian Inventory of Chemical Substances</td>
</tr>
</tbody>
</table>
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 the 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).

CERLCA: 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).

US State Regulations

**California Prop 65:** WARNING: This product can expose you to chemicals including Titanium Dioxide (13463-67-7) and Silica, Quartz (14808-60-7), which are known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

**US 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>Silica, Quartz (14808-60-7)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Titanium Dioxide (13463-67-7)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

**SECTION 16 OTHER INFORMATION**

**NFPA:**

<table>
<thead>
<tr>
<th></th>
<th>Health Hazards 1</th>
<th>Flammability 1</th>
<th>Instability 0</th>
<th>Physical &amp; Chemical Properties –</th>
</tr>
</thead>
</table>

**HMIS:**

<table>
<thead>
<tr>
<th></th>
<th>Health Hazards 1</th>
<th>Flammability 1</th>
<th>Physical Hazards 0</th>
<th>Personal Protection X</th>
</tr>
</thead>
</table>

**Further Information:**

This SDS was prepared in accordance with OSHA regulatory standards for Toxic and Hazardous Substances: 29 CFR 1910.1200.

**Disclaimer:**

This product is not intended for use in food or pharmaceuticals.

To the best of our knowledge, the information contained herein is accurate. However Duro-Last, Inc. does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be handled with care. Although Duro-Last, Inc. has described herein all of the hazards to which we are currently aware, we cannot guarantee that these are the only hazards which exist.