MATERIAL SAFETY DATA SHEET (MSDS)

PRODUCT: AS159 High Strength, Fast Cure RTV Silicone Adhesive Sealant

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufactured By: Aerospace Sealants
11966 Oakcreek Parkway
Huntley Gateway Commons, Unit #109
Huntley, IL 60142

Emergency Phone: 480-619-4386

Revised: 10-20-2014
Preparer: Sharon McDonald-Schramm

Chemical Family: Silicone Rubber

Formula: Mixture

2. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Product Composition</th>
<th>Wt. %</th>
<th>ACGIH TLV</th>
<th>OSHA TWA</th>
<th>PEL Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS Reg. No.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. HAZARDOUS</td>
<td>NONE FOUND</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. NON HAZARDOUS</td>
<td>Polydimethylsiloxane 70131-67-8</td>
<td>45-60</td>
<td>---</td>
<td>NE</td>
</tr>
<tr>
<td></td>
<td>Dimethylpolysiloxane 63148-62-9</td>
<td>15-50</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td></td>
<td>Silica 68611-44-9</td>
<td>10-19</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Methyltriacetoxysilane 4253-34-3</td>
<td>3-12</td>
<td>10</td>
<td>NE</td>
</tr>
<tr>
<td></td>
<td>Trade Secret Component 77-58-7</td>
<td>2-8</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td></td>
<td>Trade Secret Component 77-58-7</td>
<td>1-5</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td></td>
<td>Dibutyltindilaurate 4253-34-3</td>
<td>0.1-3.0</td>
<td>0.1</td>
<td>NE</td>
</tr>
</tbody>
</table>

NOTE: All solid powders are fully encapsulated in the cured and uncured product and are not hazardous in this form.

3. HAZARDS IDENTIFICATION

This materials composition is slightly hazardous according to regulatory guidelines. See Section 15 for regulatory information.

Potential Health Effects:

Ingestion: MAY BE HARMFUL IF SWALLOWED
Skin Contact: UNCURED PRODUCT WILL IRRITATE THE SKIN.
Inhalation: CAUSES IRRITATION TO THE MOUTH, NOSE AND THROAT. THIS APPLIES IN THE UNCURED STATE ONLY.
Eye Contact: UNCURED PRODUCT CONTACT IRRITATES EYES.
Medical Conditions Aggravated: NONE KNOWN
Subchronic (TARGET ORGAN) Effects: NONE KNOWN
Chronic Effects/Carcinogenity: THIS PRODUCT OR ONE OF ITS INGREDIENTS PRESENT 0.1% or MORE IS NOT LISTED OR SUSPECTED AS A CARCINOGEN BY NTP, IARC OR OSHA
Principle Routes of Exposure: ACETIC ACID RELEASED DURING CURE. THIS PRODUCT CONTAINS METHYLPOLYSILOXANES WHICH CAN GENERATE FORMALDEHYDE UPON EXPOSURE ABOVE 300 DEGREES CENTIGRADE IN ATMOSPHERES WHICH CONTAIN OXYGEN. FORMALDEHYDE IS A SKIN, EYE, AND THROAT IRRITANT.
4. FIRST AID MEASURES

Ingestion: RINSE MOUTH WITH WATER SEVERAL TIMES
Skin: REMOVE COMPLETELY WITH A DRY CLOTH OR PAPERTOWEL.
Inhalation: MOVE PERSON TO FRESH AIR.
In case of eye contact: FLUSH WITH WATER FOR 15 MINUTES AND SEEK MEDICAL ATTENTION IF IRRITATION PERSISTS.
Note to physician: NONE KNOWN

5. FIREFIGHTING MEASURES

Flash point: >300 C or 600 F
Method: NA
Ignition temp: Unknown
Flammable limits in air - lower%: NA
Flammable limits in air - upper %: NA
Sensitivity to mechanical impact: NO
Sensitivity to static discharge: NO
Extinguishing media: ALL STANDARD FIREFIGHTING MEDIA
Special firefighting procedures: NONE KNOWN

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled: SCRAPE-UP AND PLACE IN AN INERT MATERIAL FOR DISPOSAL

7. HANDLING and STORAGE

Precautions to be taken during handling and storage: CURE ONLY WHERE APPROPRIATE VENTILATION SYSTEMS EXIST.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls: NONE KNOWN
Respiratory protection: NONE REQUIRED
Protective gloves: CLOTH GLOVES
Eye and face protection: SAFETY GLASSES
Other protective equipment: NONE REQUIRED
Ventilation: CURE IN WELL VENTILATED AREAS

9. PHYSICAL and CHEMICAL PROPERTIES

Boiling point: NA
Vapor pressure: NA
Vapor density: NA
Freezing point: NA
Melting point: NA
Physical state: PASTE
Odor: VINEGAR
% Volatile by volume: <3
Evaporation rate: <1
Specific gravity: 1.14
Density: (Kg/M3) 1090
Acid/alkalinity: SLIGHTLY ACIDIC
PH: NA
VOC: NT
Solubility in water: INSOLUBLE
Solubility in organic solvents: PARTIALLY SOLUBLE IN TOLUENE
10. STABILITY and REACTIVITY

Stability: STABLE
Hazardous polymerization: WILL NOT OCCUR
Hazardous thermal decomposition/combustion products:
CARBON DIOXIDE, CARBON MONOXIDE,
SILICON DIOXIDE, FORMALDEHYDE, ACETIC ACID

Conditions to avoid: NONE KNOWN

11. TOXICOLOGICAL INFORMATION

Product Information:
Acute Oral LD50: UNKNOWN
Acute Dermal LD50: UNKNOWN
Acute Inhalation LC50: UNKNOWN
Ames Test: UNKNOWN

12. ECOLOGICAL INFORMATION

Ecotoxicological Information: UNKNOWN
Chemical Fate Information: UNKNOWN

13. DISPOSAL CONSIDERATIONS

Disposal Method: DISPOSAL SHOULD BE MADE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL CONSIDERATIONS

14. TRANSPORT INFORMATION

DOT Shipping Name: NA
DOT Hazard Class: NOT DOT REGULATED
DOT Label: NA
UN/NA Label: NA
Placards: NONE
IATA: NA
IMO IMDG-code: NA
European Class:
RID ( OCTI ): NA
ADR ( ECE ): NA
RAR ( IATA ): NA

15. REGULATORY INFORMATION

SARA Section 302: NONE FOUND
SARA ( 311, 312 ) Hazard Class: NONE
SARA ( 313 ) Chemicals: NONE
CPSC Classification: NA
WHMIS Hazard Class: NONE
Export Schedule B/HTSUS: 3910.00 SILICONES IN PRIMARY FORM.
ECCN:
Hazard Rating Systems
HMIS: HEALTH 1, FLAMMABILITY 0, REACTIVITY 0
NFPA: HEALTH 1, FLAMMABILITY 0, REACTIVITY 0
California Proposition 65: NONE

16. OTHER

This product or its components are on the European inventory (EINECS) of existing commercial chemicals. This data is offered in good faith as typical values and not as a product specification. No warranty, either expressed or implied, is made. The recommended handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific content of the intended use.