SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE PRODUCT AND SUPPLIER

PRODUCT INFORMATION

PRODUCT: FULASEAL 780 PLUMBERS ALU
PRODUCT DESCRIPTION: Silicone sealant
INTENDED USE: Industrial adhesive
PRODUCT IDENTIFIER: 823220PM

COMPANY INFORMATION

H.B. Fuller Company Australia Pty. Ltd.
16 - 22 Red Gum Drive
Dandenong South, VIC 3175
Telephone: (03) 9797 6222
Emergency telephone No: 1800 033 111
Emergency Tel NZ: 0800 734 607 (or IDD +64 473 4607)

SECTION 2: HAZARDS IDENTIFICATION

GHS Hazard Symbols:

GHS Symbol name(s): Exclamation mark
GHS Signal Word: Warning
GHS Classification: Skin Sensitisation Category 1; Serious Eye Damage/Eye Irritation Category 2A
GHS Hazard Phrases: May cause an allergic skin reaction.
Causes serious eye irritation.

GHS Precautions:

Wash thoroughly after handling.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.

First Aid Measures:

IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Wash contaminated clothing before reuse.

Disposal:
Dispose of contents/container in accordance with local/regional/national/international regulation for hazardous wastes.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>PERCENT</th>
<th>Classification</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral oil</td>
<td>64742-46-7</td>
<td>10-30</td>
<td>Acute Tox. 4; H332</td>
<td>Note N</td>
</tr>
<tr>
<td>Silane</td>
<td>Proprietary</td>
<td>5-10</td>
<td>Acute Tox. 4; H302</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Corr. 1B; H314</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Sens. 1; H317</td>
<td></td>
</tr>
</tbody>
</table>
**SAFETY DATA SHEET**

<table>
<thead>
<tr>
<th>Material</th>
<th>CAS Number</th>
<th>Quantity</th>
<th>Health Hazard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silane</td>
<td>2224-33-1</td>
<td>5 - 10</td>
<td>Eye Dam. 1; H318 Skin Irrit. 2; H315 Skin Sens. 1; H317</td>
<td></td>
</tr>
<tr>
<td>Amorphous silica</td>
<td>7631-86-9</td>
<td>5 - 10</td>
<td>* (see below)</td>
<td></td>
</tr>
<tr>
<td>Silanes</td>
<td>Proprietary</td>
<td>5 - 10</td>
<td>Eye Irrit. 2; H319 Skin Irrit. 2; H315 Skin Sens. 1; H317</td>
<td></td>
</tr>
<tr>
<td>Organotin compound</td>
<td>68928-76-7</td>
<td>5 - 10</td>
<td>Acute Tox. 3; H311 Acute Tox. 3; H301 Eye Irrit. 2; H319 Skin Irrit. 2; H315 STOT SE 3; H335, H336</td>
<td></td>
</tr>
</tbody>
</table>

*This material is only hazardous when present as an airborne dust. As supplied, and during normal use, the material is encapsulated within the product and will not present an exposure risk.*

**SECTION 4: FIRST AID MEASURES**

*IF IN EYES:* Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician.

*IF ON SKIN:* Wash with soap and water. Remove contaminated clothing, launder immediately, and discard contaminated leather goods. Get medical attention immediately.

*IF INHALED:* Remove to fresh air. Call a physician if symptoms persist.

*IF SWALLOWED:* Severely irritating. Do not induce vomiting. Seek medical attention immediately. Drink 2 glasses of water or milk to dilute. Do not give anything by mouth to an unconscious person.

**SECTION 5: FIRE FIGHTING MEASURES**

**EXTINGUISHING MEDIA:** Use water spray, foam, dry chemical or carbon dioxide.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Material will burn in a fire.

**SPECIAL FIRE FIGHTING INSTRUCTIONS:** Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon dioxide, Carbon monoxide Nitrogen containing gases Silicon dioxide

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**SPECIAL PROTECTION:** Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this MSDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including: the material spilled, the quantity of the spill, and the area in which the spill occurred. Never exceed any occupational exposure limits.

**SECTION 7: HANDLING AND STORAGE**

**Handling:** Avoid contacting and avoid breathing the material. Use only in a well ventilated area.

This product contains an ingredient that may release formaldehyde at heated cure temperatures.

This product contains an ingredient that may react with water or humidity.
release ethanol (64-17-5). The TWA for ethanol is 1000 ppm. This product contains an ingredient that may react with water or humidity to release methyl ethyl ketoxime (MEKO), CAS#96-29-7. The AIHA WEEL TWA for MEKO is 10 ppm.

Storage: Store in a cool, dry place.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Note</th>
<th>AUSTRALIAN EXPOSURE LIMITS</th>
<th>ACGIH EXPOSURE LIMITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amorphous silica</td>
<td>* (see below)</td>
<td>2 mg/m³ TWA (respirable dust, listed under Fumed silica)</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

*This material is only hazardous when present as an airborne dust. As supplied, and during normal use, the material is encapsulated within the product and will not present an exposure risk.

Biological Limit Values (ACGIH)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH Biological Exposure Index (BEI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

ENGINEERING CONTROL METHODS:

VENTILATION: General room ventilation might be required under normal conditions of use.

EYE PROTECTION: Wear safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Have an eye wash station available.

SKIN PROTECTION: Prevent contact with this product. Wear chemically resistant gloves, long sleeved shirt, an apron, and other protective equipment depending on conditions of use.

GLOVES: Butyl rubber

RESPIRATORY PROTECTION: No respiratory protection required under normal conditions of use. Use an air purifying respirator with organic vapour cartridge and dust/mist filter.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Semi-solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>Aluminum</td>
</tr>
<tr>
<td>Odor:</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odor Threshold:</td>
<td>Not established</td>
</tr>
<tr>
<td>pH:</td>
<td>Not established</td>
</tr>
<tr>
<td>Freezing/Melting Point (deg. C):</td>
<td>Not established</td>
</tr>
<tr>
<td>Boiling Point (deg. C):</td>
<td>Not established</td>
</tr>
<tr>
<td>Flash Point:</td>
<td>&gt; 204°C (400°F) COC</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>Not established</td>
</tr>
<tr>
<td>Flammability:</td>
<td>Not a flammable solid or gas</td>
</tr>
<tr>
<td>Upper Explosive Limit (% in air):</td>
<td>Not established</td>
</tr>
<tr>
<td>Lower Explosive Limit (% in air):</td>
<td>Not established</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg):</td>
<td>Not established</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET

VAPOUR DENSITY: Not established
WEIGHT PER GALLON (lbs.): 8.01
SPECIFIC GRAVITY: 0.960
SOLUBILITY: Not established
OCTANOL/WATER COEFFICIENT: Not established
AUTOIGNITION TEMPERATURE: Not established
DECOMPOSITION TEMPERATURE: Not established
VISCOSITY: No data available.
SOLIDS (% by weight): 80.0

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.
CHEMICAL INCOMPATIBILITY: Water
HAZARDOUS POLYMERIZATION: Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide Nitrogen containing gases Silicon dioxide

SECTION 11: TOXICOLOGICAL INFORMATION

Component Toxicity / Toxicology Data:

<table>
<thead>
<tr>
<th>COMPONENT NAME</th>
<th>LD50/LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral oil</td>
<td>Inhalation LC50 Rat 4.60 mg/l</td>
</tr>
<tr>
<td>Silane</td>
<td>Oral LD50 Rat 1.780 mg/kg</td>
</tr>
<tr>
<td>Amorphous silica</td>
<td>INHALATION LC50-1H Rat &gt; 2.20 mg/l</td>
</tr>
</tbody>
</table>

This product is a mixture. Unless noted, the information below is based on components.
Skin corrosion / irritation: No irritation hazard in normal industrial use.
Serious eye damage / irritation: Can cause severe irritation. Eye contact may result in corneal injury. Symptoms may include discomfort or pain, excessive blinking and tear production, with marked redness and swelling of the conjunctiva. Temporary vision impairment (cloudy or blurred vision) is possible.
Respiratory / skin sensitization: May cause an allergic skin reaction.
Germ cell mutagenicity: No data available.
Carcinogenicity: No data available.
Reproductive toxicity: No data available.
Specific target organ toxicity-single exposure: No data available.
Respiratory irritation / Narcotic effects: No data available.
Specific target organ toxicity-single exposure: No data available.
Target organs potentially affected by exposure: Lungs
Aspiration hazard: Not an aspiration hazard.

Medical Conditions Aggravated by Exposure: Lung disease

SECTION 12: ECOLOGICAL INFORMATION

OVERVIEW: No ecological information available for this product.
MOBILITY: No data available.
PERSISTENCE: No data available.
BIOACCUMULATION: No data available.
This product has not been tested for ecological effects. Relevant information for components is listed below:

<table>
<thead>
<tr>
<th>Component</th>
<th>Ecotoxicity values:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral oil</td>
<td>Acute Toxicity (Fish): 96 Hr LC50 Pimephales promelas: 35 mg/L [flow-through]</td>
</tr>
<tr>
<td></td>
<td>Acute Toxicity (Daphnia): Not established</td>
</tr>
<tr>
<td></td>
<td>Acute Toxicity (Algae): Not established</td>
</tr>
</tbody>
</table>

SECTION 13: DISPOSAL CONSIDERATIONS

This product is a prescribed waste and may only be disposed of in accordance with applicable State and local regulations. These regulations vary from jurisdiction to jurisdiction and hence the user is counselled to seek advice from the local authority and classify the waste before considering disposal. The disposal information given below is a general guide and does not replace the requirement of the local regulations.

DISPOSAL: If possible recycle, otherwise dispose strictly in accordance with local industrial waste or environmental protection regulations. This substance may, if permitted by local authorities, be disposed of in an approved incineration facility or be considered for landfill.

SPECIAL PRECAUTIONS: Do not allow this material to contaminate soil, sewerage systems or surface or ground water.

When large amounts of this product need to be disposed of the services of a registered, professional waste disposal organisation is highly recommended.

SECTION 14: TRANSPORT INFORMATION

Consult Bill of Lading for transportation information.

ADG: NOT REGULATED
IATA: NOT REGULATED
HazChem Code: Not applicable

SECTION 15: REGULATORY INFORMATION

INVENTORY STATUS

AUSTRALIA AICS: All ingredients in this mixture are listed in the Australian Inventory of Chemical Substances.

U.S. EPA TSCA: The product contains a substance that is not listed on the TSCA inventory.

CANADIAN CEPA DSL: This product contains one or more components which have not been determined to be on the DSL. If you are the importer of this product into Canada, contact H.B. Fuller for chemical tracking and notification information.

EUROPEAN REACH: As a result of the introduction of REACH into Europe, this product cannot be imported into Europe unless the REACH requirements are met.

KOREAN TCCL: This product is in compliance with the Korean Existing Chemicals List requirements.

PHILIPPINES: This product is in compliance with the Philippine Inventory of Chemicals and Chemical Substances requirements.

CHINA IECSC INVENTORY: This product is in compliance with the Inventory of Existing Chemical Substances in China (IECSC) requirements.

If you need more information about the inventory status of this product call 1+651-236-5858.
New Zealand:
Classified as Hazardous according to the Hazardous Substances (Minimum degrees of hazard) Regulations 2001.
Group standard: Surface Coatings and Colourants (Toxic [6.7]) Group Standard 2006
HSNO Approval Number: HSR002679.

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP):
Not a scheduled poison

SECTION 16: OTHER INFORMATION

SDS Date of Issue: 01-05-2017
Replaces: 26-04-2017
Changes made to previous issue: Conversion to GHS format

ACRONYMS and DEFINITIONS:
ACGIH  American Conference of Governmental Industrial Hygienists
ADG Code  Australian Code for the Transport of Dangerous Goods by Road and Rail
AICS  Australian Inventory of Chemical Substances
BEI  Biological Exposure Index
CAS Number  Chemical Abstracts Service Registry Number
CNS  Central nervous system
DG  Dangerous Goods
Hazchem Code  An emergency action code of numbers and letters, which gives information to emergency services.
IARC  International Agency for Research on Cancer
IATA Code  International Air Transport Association Code
IMDG Code  International Maritime Dangerous Goods Code
N.O.S.  Not otherwise specified
NOHSC  National Health and Safety Commission
PPE  Personal protection equipment
SUSMP  Standard for the Uniform Scheduling of Medicines and Poisons
UN Number  United Nations Number

Prepared by: The Global Regulatory Department
Phone: 1-651-236-5842

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