SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier
Product Name
Gasil HP220
Wax coated amorphous silica

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified use(s)
Additive for use in a wide range of applications including paints and coatings. Matting agent
Uses advised against
None known.

1.3 Details of the supplier of the safety data sheet
Company Identification
PQ Corporation
P.O. Box 840
Valley Forge
PA 19482
USA
Telephone:
+1 610-651-4200
E-Mail (competent person)
sds.uk@pqcorp.com

1.4 Emergency telephone number
Emergency Phone No.
+1 800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
GHS Classification
Not classified as dangerous for supply/use.

Hazards summary
Exposure to any kind of dust is potentially harmful. Dust clouds are flammable and may be explosive.

2.2 Label elements

Safety Phrases
Handle in accordance with good industrial hygiene and safety practices. Avoid inhalation of dusts.

2.3 Other hazards
Not applicable.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>%W/W</th>
<th>CAS No.</th>
<th>EINECS No. / REACH Registration</th>
<th>Hazard symbol(s) and hazard statement(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic amorphous silica</td>
<td>&gt; 85 %</td>
<td>112926-00-8 *</td>
<td>231-545-4 01-2119379499-16</td>
<td>Not classified</td>
</tr>
<tr>
<td>Hydrocarbon wax</td>
<td>&lt; 10 %</td>
<td>7732-18-5</td>
<td></td>
<td>Not classified</td>
</tr>
<tr>
<td>Water</td>
<td>&lt; 5 %</td>
<td></td>
<td>231-791-2</td>
<td></td>
</tr>
</tbody>
</table>

EC Classification No. 67/548/EEC

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures
Eye Contact  
If substance has got into the eyes, immediately wash out with plenty of water. Obtain immediate medical attention.

Skin Contact  
Wash affected skin with plenty of water. If symptoms develop, obtain medical attention.

Inhalation  
Remove patient from exposure, keep warm and at rest. If symptoms develop, obtain medical attention.

Ingestion  
Do not induce vomiting. Wash out mouth with water. If large amount swallowed or symptoms develop obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed  
Exposure to any kind of dust is potentially harmful.

4.3 Indication of any immediate medical attention and special treatment needed  
See Section: 4.1

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media  
Suitable Extinguishing Media  
Extinguish preferably with waterspray, foam or dry chemical. Be aware of the possibility of re-ignition. Cool the smouldering material with water spray to minimise the possibility of re-ignition.

Unsuitable extinguishing Media  
Carbon dioxide is unsuitable (creates dust).

5.2 Special hazards arising from the substance or mixture  
Ignites in contact with flame and supports combustion until the wax has burned off.

5.3 Advice for fire-fighters  
None.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures  
Wear suitable protective clothing. Wear eye/face protection. An approved dust mask should be worn if dust is generated during handling.

6.2 Environmental precautions  
Contain spillages.

6.3 Methods and materials for containment and cleaning up  
Contain spillages. Dampening with water can reduce dust. Sweep or preferably vacuum up and collect in suitable containers for recovery or disposal.

6.4 Reference to other sections  
See Also Section 8.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling  
Avoid generation of dust. A considerable static electrical charge can be built up during mechanical handling which may become a hazard in atmospheres containing flammable vapours. Advice on the control of static is given in British Standard BS 5958. Advice on the control of static is given in British Standard BS 5958. When handling in bulk, the possibility of dust explosion should be considered. If the risk is significant, mechanical handling equipment must be earthed and provided with explosion venting. See Also Section 8.

7.2 Conditions for safe storage, including any incompatibilities  
Keep container tightly closed and dry.

7.3 Specific end use(s)  
None known.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
8.1 Control parameters

<table>
<thead>
<tr>
<th>SUBSTANCE</th>
<th>Occupational Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic amorphous</td>
<td></td>
</tr>
<tr>
<td>silica</td>
<td>Total inhalable dust: WEL 6 mg/m³ 8h TWA. Respirable dust: WEL 2.4 mg/m³ 8h TWA.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>US ACGIH: Silica, Amorphous - Precipitated silica and silica gel: TLV withdrawn 2006</td>
</tr>
<tr>
<td></td>
<td>US OSHA: Silica amorphous - Precipitated silica: PEL 6 mg/m³ 8h TWA</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

Wear protective equipment to comply with good occupational hygiene practice. Do not eat, drink or smoke at the work place.

8.2.1 Appropriate engineering controls

Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions.

8.2.2 Personal Protection

Respiratory protection

Avoid inhalation of dusts. Wear suitable respiratory protective equipment if working in confined spaces with inadequate ventilation or where there is any risk of the exposure limits being exceeded. Advice on respiratory protective equipment is given in the HSE (Health and Safety Executive) publication HS(G)53.

Eye/face protection

Safety spectacles. Eye protection with side protection (EN 166).

Skin protection

Wear suitable protective clothing and gloves. Plastic or rubber gloves. For example EN374-3. Wear suitable overalls.

8.2.3 Environmental Exposure Controls

Avoid generation of dust.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Powder. White.

Odour

Odourless.

Odour Threshold (ppm)

Not applicable.

pH (Value)

2 - 9 at 5% w/w in water.

Freezing Point (°C)

Not applicable.

Melting Point (°C)

Silica >1000 deg C, Wax 100 deg C

Boiling Point (°C)

Silica N/A, Wax 370 deg C

Flash Point (°C) [Closed cup]

Not applicable.

Evaporation rate

Not applicable.

Flammability (solid, gas)

Not applicable.

Explosive Limit Ranges

Not applicable.

Vapour Pressure (mm Hg)

Not applicable.

Vapour Density (Air=1)

Not applicable.

Density (g/ml)

No data.

Solubility (Water)

Insoluble.

Solubility (Other)

No data.

Partition Coefficient

No data.

Auto Ignition Point (°C)

Not applicable.

Decomposition Temperature (°C)

Not applicable.

Viscosity (mPa.s)

Not applicable.

Explosive properties

Minimum explosive concentration 500 g/m³

Oxidising Properties

Not applicable.

9.2 Other information

No data.

SECTION 10: STABILITY AND REACTIVITY
SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Ingestion
No data available on mixture. The lethal dose for humans for synthetic amorphous silica is estimated at over 15000 mg/kg bw.

Inhalation
Synthetic amorphous silica has little adverse effect on lungs and does not produce significant disease or toxic effect when exposure is kept below the permitted limits. However, existing medical conditions (e.g. asthma, bronchitis) may be aggravated by exposure to dust. Effects of dust may be greater, and occur at lower levels of exposure in smokers compared to non-smokers.

Skin Contact
Dust may have a drying effect on the skin. No data available on mixture. Synthetic amorphous silica: Dermal LD50 (rabbit) >5000 mg/kg bw.

Eye Contact
Dust may cause discomfort and mild irritation.

Skin corrosion/irritation
Non-irritant. Dust may have a drying effect on the skin.

Serious eye damage/irritation
Non-irritant.

Sensitisation
Not sensitising.

Mutagenicity
No evidence of genotoxicity.

Carcinogenicity
IARC assessment: Amorphous silica is not classifiable as to its carcinogenicity to humans (Group 3).

Reproductive toxicity
No evidence of reproductive toxicity or developmental toxicity.

STOT - single exposure
Not classified

STOT - repeated exposure
No data available on mixture. Synthetic amorphous silica: Not classified.

Aspiration hazard
Not classified

Other information
Not applicable

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity
No data available on mixture. Synthetic amorphous silica is virtually inert and has no known adverse effect on the environment.

12.2 Persistence and degradability
No data available on mixture.

12.3 Bioaccumulative potential
No data available on mixture.

12.4 Mobility in soil
Synthetic amorphous silica: Inorganic.

12.5 Results of PBT and vPvB assessment
Not classified as PBT or vPvB.

12.6 Other adverse effects
None.

SECTION 13: DISPOSAL CONSIDERATIONS
13.1 Waste treatment methods

Disposal should be in accordance with local, state or national legislation. This product normally causes no problems in sewage treatment works, where it settles with the sewage sludge. Not a hazardous waste under RCRA Sec.3001.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number
Not classified as dangerous for transport.

14.2 Proper Shipping Name
Not applicable.

14.3 Transport hazard class(es)
Not applicable.

14.4 Packing group
Not applicable.

14.5 Environmental hazards
Not applicable.

14.6 Special precautions for user
None. No special packaging requirements.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
EINECS: All components listed or polymer exempt.
TSCA Inventory Status: Mixture - all components included.
AICS Inventory Status: Mixture - all components included.
DSL/NDSL Inventory Status: Mixture - all components included.

HMIS (Hazardous Material Information System): Health hazard 1, Flammability 1, Reactivity 0

SARA/Title III Hazard Categories
Immediate (acute) Health: No
Reactive Hazard: No
Delayed (chronic) Health: No
Sudden Release of Pressure: No
Fire Hazard: No

15.2 Chemical Safety Assessment
Not available.

SECTION 16: OTHER INFORMATION

Data referenced in this eSDS is from company-owned information, from data legitimately accessed by PQ Corporation through membership of Industry Consortia or other agreements, or from data provided by raw material suppliers.

This SDS was last reviewed: 05/2015
The following sections contain revisions or new statements: All sections updated to comply with Regulation (EC) No.1907/2006 (REACH) and Regulation (EC) No.1272/2008 (CLP) and their amendments.

* NOTE: 1990 CAS (Chemical Abstract Service) added additional CAS Numbers to differentiate the many amorphous silicas covered by CAS 7631-86-9. CAS 112926-00-8 identifies amorphous silica gel or precipitate containing 0% crystalline silica.
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