SAFETY DATA SHEET

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

1.1 Product identifier
Product Name: Gasil HP870
Alternative names: 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.
EC 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
EC Classification: Not classified as dangerous for supply/use.
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

Regulation (EC) No. 1272/2008 (CLP)

<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</td>
<td>85</td>
<td>112926-00-8 *</td>
<td>231-545-4 01-2119379499-16</td>
<td>Not classified</td>
</tr>
<tr>
<td>silica</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrocarbon wax</td>
<td>10</td>
<td></td>
<td>Not classified</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>5</td>
<td>7732-18-5</td>
<td>231-791-2</td>
<td></td>
</tr>
</tbody>
</table>

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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 silica</td>
<td>UK EH40: Silica amorphous Total inhalable dust: WEL 6 mg/m3 8h TWA. Respirable dust: WEL 2.4 mg/m3 8h TWA. US ACGIH: Silica, Amorphous - Precipitated silica and silica gel: TLV withdrawn 2006 US OSHA: Silica amorphous - Precipitated silica: PEL 6mg/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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Powder. White.</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless.</td>
</tr>
<tr>
<td>Odour Threshold (ppm)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>pH (Value)</td>
<td>2-9 at 5% w/w in water.</td>
</tr>
<tr>
<td>Freezing Point (°C)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Melting Point (°C)</td>
<td>Silica &gt;1000 deg C, Wax 100 deg C</td>
</tr>
<tr>
<td>Boiling Point (°C)</td>
<td>Silica N/A, Wax 370 deg C</td>
</tr>
<tr>
<td>Flash Point (°C) [Closed cup]</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Explosive Limit Ranges</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Vapour Pressure (mm Hg)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Vapour Density (Air=1)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Density (g/ml)</td>
<td>No data.</td>
</tr>
<tr>
<td>Solubility (Water)</td>
<td>Insoluble.</td>
</tr>
<tr>
<td>Solubility (Other)</td>
<td>No data.</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>No data.</td>
</tr>
<tr>
<td>Auto Ignition Point (°C)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Decomposition Temperature (°C)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Viscosity (mPa.s)</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>
Explosive properties
Minimum explosible concentration 500 g/m³
Oxidising Properties
Not applicable.
9.2 Other information
No data.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
See Section: 10.3
10.2 Chemical stability
Stable under normal conditions.
10.3 Possibility of hazardous reactions
Take precautionary measures against static discharges.
10.4 Conditions to avoid
See Section: 10.3
10.5 Incompatible materials
Avoid contact with: Strong oxidising agents.
10.6 Hazardous decomposition product(s)
None known.

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.
Hydrocarbons are List I substances in the EEC Directive 76/464 for the control of dangerous substances into the aquatic environment.

12.2 Persistence and degradability
No data available on mixture.

12.3 Bioaccumulative potential
No data available on mixture.
Synthetic amorphous silica: Inorganic.

12.4 Mobility in soil
Not applicable.

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.
This material is not classified as hazardous waste under EC Directive 2008/98/EC (and amendments). This material is not classified as hazardous waste under the Hazardous Waste (England and Wales) Regulations SI 2005 No. 894. This material is not classified as hazardous waste under the Hazardous Waste (England and Wales) Regulations SI 2005 No. 894. May be disposed of by landfill in accordance with local regulations.

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.
German Water Hazard Classification VwVwS: not hazardous to water - nwg.

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: 03/2015
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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