SAFETY DATA SHEET

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

1.1 Product identifier
Product Name: VALFOR® 100 Zeolite NaA
Alternative names: Hydrated zeolite sodium A powder
CAS No.: 1318-02-1
EINECS No.: 215-283-8

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified use(s): Binding agent; detergents.
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.

2.2 Label elements
Hazard pictogram(s): Not applicable.

Hazard statement(s): None.
Precautionary statement(s): None.

EC Classification: Not classified as dangerous for supply/use.

Hazard Symbol: Not classified

Risk Phrases: Not classified

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

2.3 Other hazards: Not classified as PBT or vPvB.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Revision: GHS
Date of Issue: 04/2015
Date Previous Issue: 5/22/2009
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
Compatible with all standard fire fighting techniques.

Unsuitable extinguishing Media
None known.

5.2 Special hazards arising from the substance or mixture
Not applicable. Inorganic powder or granules. Non-combustible.

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. See Section: 8.2

6.2 Environmental precautions
This product is virtually inert and has no known adverse effect on the environment.

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. Handle in accordance with good industrial hygiene and safety practices. See Also Section 8.
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.
7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed and dry.

7.3 Specific end use(s)

Identified uses are described further after section 16 of this document.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

<table>
<thead>
<tr>
<th>SUBSTANCE: Sodium aluminosilicate</th>
<th>Occupational Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK EH40: Dust</td>
<td>Total inhalable: WEL 10mg/m3 8h TWA. Respirable: WEL 4mg/m3 8h TWA.</td>
</tr>
<tr>
<td>ACGIH: Particulates not otherwise classified</td>
<td>Inhalable TLV 10mg/m3 8h TWA. Respirable: TLV 3mg/m3 8h TWA.</td>
</tr>
<tr>
<td>OSHA: Inert or Nuisance Dust</td>
<td>Total dust: PEL 15mg/m3 8h TWA. Respirable fraction: PEL 5mg/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 workplace.

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. Dust mask: FFP1 (EN 149).

Eye/face protection
Safety spectacles. Goggles.

Skin protection
Wear suitable protective clothing and gloves. Plastic or rubber gloves. For example EN374-3. Wear suitable overalls. For example EN ISO 13982 (dust), EN 14605 (liquid splashes).

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)
10.1 - 11.4 at 5% w/w in water.

Freezing Point (°C)
Not applicable.

Melting Point (°C)
> 1000

Boiling Point (°C)
Not applicable.

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.
SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
See Section: 10.3

10.2 Chemical stability
Stable.

10.3 Possibility of hazardous reactions
None known.

10.4 Conditions to avoid
See Section: 10.3

10.5 Incompatible materials
See Section: 10.3

10.6 Hazardous decomposition product(s)
None known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity
Ingestion
Oral LD50 (rat) >2000 mg/kg bw

Inhalation
Sodium aluminosilicate is considered to be a nuisance dust 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. Inhalation LC50 (rat) >575 g/m³

Skin Contact
Dust may have a drying effect on the skin. Dermal LD50 (rat) >2000 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. In vitro/in vivo negative.

Carcinogenicity
No structural alerts. IARC assessment: Similar material (synthetic zeolite) 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
Not classified. NOAEL oral (rat) 250-300 mg/kg bw/d

Aspiration hazard
Not classified

Other information
Not applicable

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity
Sodium aluminosilicate is virtually inert and has no known adverse effect on the environment.

Fish (Fathead minnow (Pimephales promelas)) LC50 (96 hour) >680 mg/l

Aquatic invertebrates: (Daphnia magna) EC50 (48 hour) >100 mg/l

12.2 Persistence and degradability
Inorganic.

12.3 Bioaccumulative potential
Inorganic. The substance has no potential for bioaccumulation.

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
Sinks in water

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Disposal should be in accordance with local, state or national legislation.
Not a hazardous waste under RCRA Sec.3001.
May be disposed of by landfill in accordance with local regulations.
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.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number
Not applicable.
14.2 Proper Shipping Name
Not applicable.
14.3 Transport hazard class(es)
Not classified as dangerous for transport.
14.4 Packing group
Not applicable.
14.5 Environmental hazards
Not classified as a Marine Pollutant.
14.6 Special precautions for user
None known. 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
TSCA Inventory Status: Reported/Included.
AICS Inventory Status: Reported/Included.
DSL/NDSL Inventory Status: Reported/Included.
There is no CERCLA Reportable Quantity for this material.
SARA TITLE III: This material is not a listed Toxic Chemical subject to the reporting requirements of SARA Title III §313 and 40 C.F.R. Part 372. Hazard Categories under SARA Title III §§311/312: Acute.
German Water Hazard Classification VwVwS: WGK class 1 (low hazard to water).
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SECTION 16: OTHER INFORMATION

Data referenced in this eSDS is from company-owned information and from data legitimately accessed by PQ Corporation through membership of Industry Consortia or other agreements. This includes data relating to toxicology, ecotoxicology, DNELs, PNECs and other information in this eSDS and its annex.

This SDS was last reviewed: 04/2015
The following sections contain revisions or new statements: No significant changes required to this version at last review.
This product does not meet the criteria for requiring a safety data sheet in accordance with REACH (Article 31). This product is not classified as hazardous so exposure scenarios are not required.

GLOSSARY
DNEL: Derived No Effect Level
PNEC: Predicted No Effect Concentration
PBT: Persistent, Bioaccumulative and Toxic

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