SAFETY DATA SHEET

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

1.1 Product identifier
Product Name: CBV 712
Alternative names: ZEOLITE AMMONIUM VUSY POWDER
REACH Registration No.: 01-2119455853-31

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified use(s): Catalyst.
Uses advised against:

1.3 Details of the supplier of the safety data sheet
Company Identification: Zeolyst International
280 Cedar Grove Road
Conshohocken
PA 19428-2240
USA
Telephone: +1 610-651-4200
E-Mail (competent person): sds.uk@pqcorp.com

1.4 Emergency telephone number
Emergency Phone No.: Zeolyst +1 610-651-4200
Chem Trec +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.

2.2 Label elements
Signal word(s): Not applicable
Hazard statement(s): Not applicable
Precautionary statement(s): Not applicable

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>Zeolite</td>
<td>100</td>
<td>1318-02-1</td>
<td>215-283-8</td>
<td></td>
</tr>
</tbody>
</table>

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 for at least 15 minutes. If symptoms develop, obtain medical attention.

Skin Contact
Wash affected skin with plenty of water. Continue to wash the affected area for at least 15 minutes. 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. Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed
May cause irritation to skin and eyes. May cause irritation to the respiratory system.

4.3 Indication of any immediate medical attention and special treatment needed
Wash immediately with water.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media
Suitable Extinguishing Media
Select extinguishing agent appropriate to other materials involved. Normal extinguishing media.

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
Chemical goggles (EN 166). Wear suitable protective clothing. Impervious gloves and boots.

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 Also Section 8.

6.2 Environmental precautions
Prevent entry into drains.

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. See also Section 8

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid generation of dust. Avoid contact with skin and eyes. Wash thoroughly after handling. Do not eat, drink or smoke at the work place. Wear protective equipment to comply with good occupational hygiene practice.

7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed and dry. Store in a cool, dry location. Not applicable.

7.3 Specific end use(s)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
## SUBSTANCE: Occupational Exposure Limits

<table>
<thead>
<tr>
<th>General Dust - Exposure limit not established for zeolite</th>
<th>UK EH40: Dust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total inhalable: WEL 10mg/m3 8h TWA. Respirable: WEL 4mg/m3 8h TWA. ACGIH: Particulates not otherwise classified</td>
<td></td>
</tr>
<tr>
<td>Inhalable TLV 10mg/m3 8h TWA. Respirable: TLV 3mg/m3 8h TWA.</td>
<td></td>
</tr>
<tr>
<td>OSHA: Inert or Nuisance Dust</td>
<td></td>
</tr>
<tr>
<td>Total dust : PEL 15mg/m3 8h TWA. Respirable fraction : PEL 5mg/m3 8h TWA.</td>
<td></td>
</tr>
</tbody>
</table>

### 8.2 Exposure controls

#### 8.2.1 Appropriate engineering controls

Provide adequate ventilation, including appropriate local extraction if dusts, fumes or vapours are likely to be evolved. 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. Emergency shower and eye wash facilities should be readily available.

#### 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.

**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.

#### 8.2.3 Environmental Exposure Controls

Not available.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

- **Appearance**: Powder. White.
- **Odour**: Odourless.
- **Odour Threshold (ppm)**: Not available.
- **pH (Value)**: Not applicable.
- **Freezing Point (°C)**: Not applicable
- **Melting Point (°C)**: > 1000
- **Boiling Point (°C)**: Not applicable
- **Flash Point (°C) [Closed cup]**: 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)**: Not applicable
- **Solubility (Water)**: Insoluble.
- **Solubility (Other)**: Not applicable
- **Partition Coefficient**: Not applicable
- **Auto Ignition Point (°C)**: Not applicable
- **Decomposition Temperature (°C)**: Not available.
- **Viscosity (mPa. s)**: Not applicable
- **Explosive properties**: Not applicable
- **Oxidising Properties**: Not applicable

#### 9.2 Other information

Not available.

### SECTION 10: STABILITY AND REACTIVITY

#### 10.1 Reactivity

Stable.

#### 10.2 Chemical stability

Stable.
10.3 Possibility of hazardous reactions
Contact with water generates heat. Ammonia may be released on contact with strong bases.

10.4 Conditions to avoid
Keep away from moisture.

10.5 Incompatible materials
Not available.

10.6 Hazardous decomposition product(s)
Ammonia, Oxides of nitrogen

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Acute toxicity
Ingestion
Avoid ingestion.

Inhalation
Avoid inhalation of dusts. 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.

Eye Contact
Dust may cause discomfort and mild irritation.

Serious eye damage/irritation
Not applicable.

Sensitisation
Not classified

Mutagenicity
Not classified

Carcinogenicity
IARC assessment: Similar material (synthetic zeolite) is not classifiable as to its carcinogenicity to humans (Group 3).

Reproductive toxicity
Not classified

STOT - single exposure
Not classified

STOT - repeated exposure
Not classified

Aspiration hazard
Not classified

Other information
Not available.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity
No environmental hazards have been reported or known.

12.2 Persistence and degradability
Not available.

12.3 Bioaccumulative potential
Not available.

12.4 Mobility in soil
Not available.

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

12.6 Other adverse effects
Not available.

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. 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 classified as hazardous under DOT or US Transport Recommendations.

Not classified according to the United Nations ‘Recommendations on the Transport of Dangerous Goods’.

Not restricted under IATA regulations.
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.

SECTION 16: OTHER INFORMATION

This SDS was last reviewed: 05/2014
The following sections contain revisions or new statements: All sections.

EC Classification No. 67/548/EEC Not classified as dangerous for supply/use.
Hazard Symbol
Risk Phrases
Safety Phrases Handle in accordance with good industrial hygiene and safety practices. Avoid inhalation of dusts.

GHS Classification Not classified as dangerous for supply/use.
Signal word(s) Not applicable
Hazard pictogram(s)
Hazard statement(s) Not applicable
Precautionary statement(s) Not applicable

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Zeolyst International gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Zeolyst International accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.