SAFETY DATA SHEET

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

1.1 Product identifier
Product Name: CBV 300
Alternative names: Zeolite, Y-Type, Ammonium form
CAS No.: 1318-02-1
EINECS No.: 215-283-8
REACH Registration No.: 01-2119429034-49-0011

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified use(s): Catalyst.
Uses advised against: Not available.

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.

Hazards summary:
May cause irritation to skin and eyes. May cause irritation to the respiratory system.

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 01-2119455853-31-0011</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>%W/W</th>
<th>CAS No.</th>
<th>EINECS No. / REACH Registration</th>
<th>EC Classification and Risk Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zeolite</td>
<td>100</td>
<td>1318-02-1</td>
<td>215-283-8 01-2119455853-31-0011</td>
<td>Not applicable.</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

Flush the contaminated area of body with large amounts of 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.

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

Use appropriate container to avoid environmental contamination.

6.3 Methods and materials for containment and cleaning up

Contain spillages. Dampeing 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

Not applicable.

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/low-temperature, well-ventilated (dry) place.

7.3 Specific end use(s)

Not applicable.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
### SUBSTANCE: Zeolite

#### Occupational Exposure Limits

<table>
<thead>
<tr>
<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>
</tr>
<tr>
<td>Inhalable TLV 10mg/m³ 8h TWA. Respirable: TLV 3mg/m³ 8h TWA.</td>
</tr>
<tr>
<td>OSHA: Inert or Nuisance Dust</td>
</tr>
<tr>
<td>Total dust: PEL 15mg/m³ 8h TWA. Respirable fraction: PEL 5mg/m³ 8h TWA.</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

Local exhaust recommended.

### 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>Not applicable.</td>
</tr>
<tr>
<td>Freezing Point (°C)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Melting Point (°C)</td>
<td>&gt; 1000</td>
</tr>
<tr>
<td>Boiling Point (°C)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Flash Point (°C) [Closed cup]</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>&gt;1</td>
</tr>
<tr>
<td>Solubility (Water)</td>
<td>Insoluble.</td>
</tr>
<tr>
<td>Solubility (Other)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not applicable.</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>
<tr>
<td>Explosive properties</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Oxidising Properties</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

#### 9.2 Other information

Not applicable.

### SECTION 10: STABILITY AND REACTIVITY

#### 10.1 Reactivity

Stable.

#### 10.2 Chemical stability

Stable.
SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Ingestion
Low oral toxicity, but ingestion may cause irritation of the gastrointestinal tract.

Inhalation
Avoid inhalation of dusts. However, existing medical conditions (eg. 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.

Eye Contact
Dust may cause discomfort and mild irritation.

Skin corrosion/irritation

Serious eye damage/irritation

Sensitisation
It is not a skin sensitiser.

Mutagenicity
There is no evidence of mutagenic potential.

Carcinogenicity
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 available.

STOT - repeated exposure
Not available.

Aspiration hazard

Other information
Not available.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity
No environmental hazards have been reported or known.

12.2 Persistence and degradability
No data.

12.3 Bioaccumulative potential
No data. The product has low potential for bioaccumulation.

12.4 Mobility in soil
No data.

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

12.6 Other adverse effects
None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Disposal should be in accordance with local, state or national legislation.

STOT - single exposure
Not available.

STOT - repeated exposure
Not available.

Aspiration hazard

Other information
Not available.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

CBV 300
14.2 Proper Shipping Name

14.3 Transport hazard class(es)

14.4 Packing group

14.5 Environmental hazards
Not classified as a Marine Pollutant.

14.6 Special precautions for user
No special packaging requirements.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

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.
Contains no SARA Title III, Section 313 notification chemical present at or above the deminimus concentration.
German Water Hazard Classification VwVwS: WGK class 1 (low hazard to water).
HMIS (Hazardous Material Information System): 1,0,0

15.2 Chemical Safety Assessment

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

Safety Phrases

GHS Classification
Not classified as dangerous for supply/use.

Signal word(s)
Not classified.

Hazard pictogram(s)

Hazard statement(s)

Precautionary statement(s)

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