SAFETY DATA SHEET

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

1.1 Product identifier
Product Name: CBV 400
Alternative names: ZEOLITE HY POWDER
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.

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

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>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.

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**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.

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**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. 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**

Not applicable.

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**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.

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**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>Zeolite</td>
<td>UK EH40: Dust</td>
</tr>
<tr>
<td></td>
<td>Total inhalable: WEL 10mg/m3 8h TWA. Respirable: WEL 4mg/m3 8h</td>
</tr>
<tr>
<td></td>
<td>TWA. ACGIH: Particulates not otherwise classified</td>
</tr>
<tr>
<td></td>
<td>Inhalable TLV 10mg/m3 8h TWA. Respirable: TLV 3mg/m3 8h TWA.</td>
</tr>
<tr>
<td></td>
<td>OSHA: Inert or Nuisance Dust</td>
</tr>
<tr>
<td></td>
<td>Total dust : PEL 15mg/m3 8h TWA. Respirable fraction : PEL 5mg/m3</td>
</tr>
<tr>
<td></td>
<td>8h TWA.</td>
</tr>
</tbody>
</table>

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Revision: v1
Date of Issue: 07/2014
Date Previous Issue: 3/2006
Reference: Zeolyst Intl - GHS - 3
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
Appearance
Powder. White.

Odour
Odourless.

Odour Threshold (ppm)
Not applicable.

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.

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)
>1

Solubility (Water)
Insoluble.

Solubility (Other)

Partition Coefficient
Not applicable.

Auto Ignition Point (°C)
Not applicable.

Decomposition Temperature (°C)
Not applicable.

Viscosity (mPa. s)
Not applicable.

Explosive properties
Not applicable.

Oxidising Properties
Not applicable.

9.2 Other information
Not applicable.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
Stable.

10.2 Chemical stability
Contact with water generates heat

10.3 Possibility of hazardous reactions
Contact with water generates heat

10.4 Conditions to avoid
Contact with water generates heat

10.5 Incompatible materials
Contact with water generates heat

10.6 Hazardous decomposition product(s)
None known

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**
Dust may have a drying effect on the skin.

**Serious eye damage/irritation**
It is not a skin sensitiser.

**Sensitisation**
There is no evidence of mutagenic potential.

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

**Carcinogenicity**
No evidence of reproductive toxicity or developmental toxicity.

**Reproductive toxicity**
Not available.

**STOT - single exposure**
Not available.

**STOT - repeated exposure**
Not available.

**Aspiration hazard**
Not available.

**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.

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

14.3 Transport hazard class(es)
Not classified as hazardous under DOT or US Transport Recommendations.

14.4 Packing group
Not classified as a Marine Pollutant.

14.5 Environmental hazards
No special packaging requirements.

14.6 Special precautions for user
Not classified as a Marine Pollutant.

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

**SECTION 14: TRANSPORT INFORMATION**

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

14.2 Proper Shipping Name
Not classified as hazardous under DOT or US Transport Recommendations.

14.3 Transport hazard class(es)
Not classified as hazardous under DOT or US Transport Recommendations.

14.4 Packing group
Not classified as a Marine Pollutant.

14.5 Environmental hazards
No special packaging requirements.
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: 07/2014
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.

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