SAFETY DATA SHEET

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

1.1 Product identifier
Product Name: CBV 28014
Alternative names: ZEOLITE AMMONIUM ZSM-5 POWDER
REACH Registration No.: 01-2119455853-31-0012

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

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.

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

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>Zeolite</td>
<td>100</td>
<td>1318-02-1</td>
<td>215-283-8 01-2119455853-31-0012</td>
<td>Not classified.</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
Normal extinguishing media. As appropriate for surrounding fire.

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

**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
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.

6.4 Reference to other sections
See 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/low-temperature, well-ventilated (dry) place.

7.3 Specific end use(s)
Not available.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

8.1 Control parameters
### Occupational Exposure Limits

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

Use with local exhaust ventilation.

### 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 available.</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>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 (Pascal)</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 available.</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not available.</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 available.</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 available.

### SECTION 10: STABILITY AND REACTIVITY

#### 10.1 Reactivity

Not to be expected.

#### 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 heat.

10.5 Incompatible materials
None

10.6 Hazardous decomposition product(s)
Ammonia, Nitrogen oxides

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. 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.

Eye Contact
Dust may cause discomfort and mild irritation.

Sensitisation
It is not a skin sensitisser.

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.

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.
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. 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 dangerous for transport.

14.3 Transport hazard class(es)
Not applicable.

14.4 Packing group
Not applicable.

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.
1,0,0

15.2 Chemical Safety Assessment  
Not applicable.

SECTION 16: OTHER INFORMATION

This SDS was last reviewed: 09/2017
The following sections contain revisions or new statements: All sections.

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.