

Trade Name: **VALFOR® 100 Zeolite NaA**
Date Prepared: **April 5, 2012**

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: **VALFOR® 100 Zeolite NaA**
Product description: **Hydrate zeolite sodium A powder**
Product Use: **Detergent Builder**
Manufacturer: **PQ Corporation**
P. O. Box 840, Valley Forge, PA USA
Phone number: 610-651-4200
Supplier: **National Silicates**
429 Kipling Ave, Toronto, ON M8Z 5C7
Phone number: 416-255-7771
Fax number: 416-201-4347
In case of emergency call: **1 416-255-7771**

2. COMPOSITION/INFORMATION ON INGREDIENTS

<i>Chemical Name</i>	<i>CAS Registry Number</i>	<i>Wt. %</i>	<i>OSHA PEL</i>	<i>ACGIH TLV</i>
Zeolite	68989-22-0	78-82%	15 mg/m³ total dust 5 mg/m³ respirable (particulates not otherwise regulated)	10 mg/m³ 3 mg/m³ respirable
Water	7732-18-5	18-22%	Not established	Not established

3. HAZARDS IDENTIFICATION

Emergency Overview: **White, odourless, powder. May cause respiratory irritation. May cause irritation to the eyes and skin. Non-combustible.**
Eye contact: **Causes mild irritation to the eyes.**
Skin contact: **May cause irritation to the skin.**
Inhalation: **May cause respiratory irritation.**
Ingestion: **No known hazards. Inedible.**
Chronic hazards: **No known hazards.**
Physical hazards: **No known hazards.**

4. FIRST AID MEASURES

<i>Eye:</i>	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists.
<i>Skin:</i>	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops and persists. Wash clothing before reuse. Thoroughly clean shoes before reuse.
<i>Inhalation:</i>	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<i>Ingestion:</i>	Not applicable.

5. FIRE FIGHTING MEASURES

<i>Flammable limits:</i>	This material is noncombustible.
<i>Extinguishing Media:</i>	This material is compatible with all extinguishing media
<i>Hazards to fire-fighters:</i>	See Section 3 for information on hazards when this material is present in the area of a fire.
<i>Fire-fighting equipment:</i>	The following protective equipment for fire fighters is recommended when this material is present in the area of a fire: chemical goggles, body-covering protective clothing, chemical resistant gloves, and rubber boots.
Hazardous Combustion Products:	Not available
Explosion data	
Sensitivity to mechanical impact and static discharge:	Not applicable

6. ACCIDENTAL RELEASE MEASURES

<i>Personal protection:</i>	Wear chemical goggles, body-covering protective clothing, chemical resistant gloves, and rubber boots, NIOSH-approved dust respirator where dust occurs. See section 8.
<i>Environmental Hazards:</i>	Sinks in water. No known environmental hazards.
<i>Small spill cleanup:</i>	Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. Use appropriate PPE. See section 8.
<i>Large spill cleanup:</i>	Keep unnecessary people away; isolate hazard area and deny entry. Do not touch or walk through spilled material. Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. Use appropriate PPE. See section 8.
<i>CERCLA RQ (US):</i>	There is no CERCLA Reportable Quantity for this material. If a spill goes off site, notification of state and local authorities is recommended.



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7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing dust. Keep container closed. Promptly clean up spills. Wash thoroughly after handling.

Storage: Keep containers closed. Store in original containers or clean metal, plastic, or fibre containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls: Use with adequate ventilation. Safety shower and eyewash fountain should be within direct access.

Respiratory protection: Use a NIOSH-approved dust respirator where dust occurs. Observe Provincial regulations for respirator use.

Skin protection: Wear body-covering protective clothing and gloves.

Eye protection: Wear chemical goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Powder.

Color: White.

Odour: Odourless.

pH: (Water dispersions) 10.1-11.4

Bulk density: Approximately 25-30 lbs/ft³

Solubility in water: Insoluble.

Flash point: Not applicable

Auto-ignition temperature: Not applicable

Vapor pressure: Not applicable

Vapor density: Not applicable

Evaporation rate: Not applicable

Boiling point: Not applicable

Freezing point: Not applicable

Coefficient of water /oil distribution: Not applicable

10. STABILITY AND REACTIVITY

Stability: Stable.

Conditions to avoid: None.

Materials to avoid: Hydrides and other water-reactive compounds, strong acids, strong alkalies.

Hazardous decomposition products: None.



11. TOXICOLOGICAL INFORMATION

<i>Acute Data:</i>	<p>When tested for primary eye irritation potential, hydrated sodium zeolite A was non-irritating or caused mild or slight irritation which subsided within 48 hours. When tested for primary skin irritation potential, hydrated sodium zeolite A was non-irritating or caused mild irritation. This material is acutely non-toxic by ingestion. When tested for respiratory irritation potential, hydrated sodium zeolite A caused no effects or irritation similar to calcium carbonate and less than silica.</p>
<i>Subchronic Data:</i>	<p>In a study of rats fed hydrated zeolite A for 168 or 200 days at 0.125% and 2% of the diet adverse effects were reported in the urinary bladder and kidneys similar to those reported for other silicates ingested at high levels.</p>
<i>Special Studies:</i>	<p>Mutagenicity: No information available. Carcinogenicity: In a study of rats fed hydrated zeolite A for 104 weeks at dosages as high as 0.1% of the diet caused adverse effects to the kidneys, but no treatment associated carcinogenic effect. No carcinogenic or fibrogenic effects were observed in rats exposed by inhalation to approximately 20 mg/m³ hydrated zeolite A for 5 hrs/day, 3 days/week for 22 months. Hydrated sodium zeolite A is not listed by IARC, NTP or OSHA as a carcinogen. Sensitization to product: Not applicable Reproductive toxicity: Not applicable Teratogenicity: Not applicable Name of toxicologically synergistic products: Not applicable.</p>

12. ECOLOGICAL INFORMATION

<i>Eco toxicity:</i>	<p>Both acute and long term studies of sodium zeolite A on freshwater microcrustacean, <i>Daphnia magna</i>, and the freshwater fish, <i>Idus idus melantos</i>, showed no significant effects on survival or reproduction. 96 hour lethality tests with Sodium Zeolite A on the freshwater species, <i>Lepomis macrochirus</i>, <i>Ictalurus punctatus</i>, and <i>Pimephales promelas</i>, also did not reveal any effects with concentrations of Sodium Zeolite of up to 680 mg/L. Similar results were obtained for the marine species <i>Crassostrea virginica</i>, <i>Penaeus duorarum</i>, and <i>Lagodon rhomboides</i> at concentrations of Sodium Zeolite A of up to 780 mg/L. A 30-day test with fathead minnows showed no significant effects of suspended Sodium Zeolite A on hatchability, survival, or growth at the highest concentration tested, 87 mg/L. Long term pond studies also failed to show any deleterious effects of sodium zeolite A on zooplankton, macroinvertebrae, or fish populations, when ponds were treated either with 80-200 mg/L sodium Zeolite A under static conditions, or with a continuous input of 15 mg/L.</p>
<i>Environmental Fate:</i>	<p>Sodium zeolite A is thermodynamically unstable. In aqueous suspensions, Sodium zeolite A will transform to amorphous sodium aluminosilicate in minutes to hours at natural environmental pH. Because sodium zeolite A rapidly hydrolyzes under environmental conditions it cannot bioaccumulate.</p>
<i>Physical/Chemical:</i>	<p>Sinks in water. Only water will evaporate from this material.</p>

13. DISPOSAL CONSIDERATIONS

<i>Disposal Method:</i>	Dispose in accordance with federal, provincial and local regulations.
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14. TRANSPORT INFORMATION

<i>TDG UN Status:</i>	This material is not regulated hazardous material for transportation.
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15. REGULATORY INFORMATION

<i>WHMIS (Canada):</i>	D2B This product has been classified in accordance with the hazard criteria of the <i>Controlled Products Regulations</i> and the MSDS contains all the information required by the <i>Controlled Products Regulations</i> .
<i>CERCLA (US):</i>	No CERCLA Reportable Quantity has been established for this material.
<i>SARA TITLE III (US):</i>	Not an Extremely Hazardous Substance under §302. Not a Toxic Chemical under §313. Hazard Categories under §§311/312: Acute
<i>TSCA (US):</i>	All ingredients of this material are listed on the TSCA inventory.
<i>FIFRA:</i>	Sodium zeolite A is exempt from the requirement of a tolerance when used in accordance with good agricultural practice as an inert (or occasionally active) ingredient in pesticide formulations applied to growing crops or to raw agricultural commodities after harvest when used as a solid diluent, carrier pursuant to 40 CFR §180.1001.
<i>FDA:</i>	The use of ADVERA sodium zeolite A is authorized by FDA as a costabilizer for polyvinyl chloride plastics intended for single and repeated use in contact with food, at levels not to exceed 5% by weight of the finished food contact article pursuant to FCN 000134; and as a for use as a pigment extender at levels not to exceed 5.4 per-cent by weight of the finished paper and paperboard pursuant to 21 CFR §176.170.

16. OTHER INFORMATION

Prepared by: **HSE Dept**
Supersedes revision of: **April 29, 2009**

THE INFORMATION ON THIS SAFETY DATA SHEET IS BELIEVED TO BE ACCURATE AND IT IS THE BEST INFORMATION AVAILABLE TO NATIONAL SILICATES THIS DOCUMENT IS INTENDED ONLY AS A GUIDE TO THE APPROPRIATE PRECAUTIONS FOR HANDLING A CHEMICAL BY A PERSON TRAINED IN CHEMICAL HANDLING. NATIONAL SILICATES MAKES NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED WITH RESPECT TO SUCH INFORMATION OR THE PRODUCT TO WHICH IT RELATES, AND WE ASSUME NO LIABILITY RESULTING FROM THE USE OR HANDLING OF THE PRODUCT TO WHICH THIS SAFETY DATA SHEET RELATES. USERS AND HANDLERS OF THIS PRODUCT SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION PROVIDED HEREIN FOR THEIR OWN PURPOSES.

