



PROFESSIONAL GRADE
INSUL-3K™
 INSULATING CERAMIC
 MICROSPHERES ADDITIVE

**PRODUCT
 DATA**
#9300

07/21/09
superseding: 05/04/09

PRODUCT DESCRIPTION:

INSUL-3K™ is an insulating high-tech synthetic silicate ceramic solid microspheres additive for paints and coatings. The microspheres in **INSUL-3K™** are similar to the material of which the space shuttle tiles are made, giving it unique properties that reflect and dissipate heat away from the coated surface. Since **INSUL-3K™** are round spheres, they have the lowest surface area to volume ratio of any other shape, therefore they can increase volume loading capacity thus increasing solids, reducing VOC's and reduced shrinkage in the paint or coating film upon drying. Because of the high strength of the silicate ceramic microspheres, **INSUL-3K™** also increases the abrasion and scrub resistance of your paint or coating. **INSUL-3K™** is safe, non-toxic and easy to use, making it ideal for everyone from home owners to large commercial facility managers.

PRODUCT USES:

INSUL-3K™ can be added to most any paint, coating or even stucco. It is suitable for use on roofs, ceilings and walls, both interior and exterior. It can be used in hot weather climates to keep buildings cool and cold weather climates to keep buildings warm. **INSUL-3K™** is more efficient in warmer climates.

TEXTURE & SHEEN PROPERTIES:

INSUL-3K™ will sometimes add a slight texture to most paints and coatings. This texture is generally not visible, but might be felt. It will also flatten the sheen of a coating somewhat. With a flat finish this will not be noticeable, but satin and semi-gloss finishes will lose some of their sheen. If a high gloss finish is desired it is recommended that **INSUL-3K™** be added to the primer coat and then again in the first coat. Complete the application by adding a final coat without **INSUL-3K™**.

PROPORTION SPECIFICATIONS:

(These are recommended addition ratios and may vary from product to product, add gradually until the appropriate mix is achieved)

Gallon: 1 to 2 pounds
 Five Gallons: 5 to 10 pounds

MIXING:

It is advisable to use a spare or larger container for mixing since the volume of the mixture will be larger than the original container capacity. Gradually pour the **INSUL-3K™** into the paint or coating while mechanically mixing with a drill motor and paddle.

SURFACE PREPARATION:

Refer to the Surface Preparation on the manufacturer's data sheet for the specific product to which **INSUL-3K™** will be added.

APPLICATION PROCEDURE:

Refer to the Application Procedure on the manufacturer's data sheet for the specific product to which **INSUL-3K™** will be added. If using a sprayer, the minimum tip size is .019 or the tip size that is recommended by the paint or coating manufacturer, whichever is larger. Remove line filters and gun filters before spraying.

CLEAN UP:

Refer to the clean up section on the manufacturer's data sheet for the specific paint or coating to which **INSUL-3K™** will be added.

TECHNICAL SPECIFICATIONS:

| | |
|--|---|
| COLOR: White COMPOSITION: Silicate Ceramic CRUSH STRENGTH: 60,000 Pounds per Sq. Inch (90% survival) | TRUE DENSITY: 2.4 grams per cubic centimeter PACKAGING: 1 Pound & 5 Pound Packages SIZE DISTRIBUTION: 10 th %: 1 micron 50 th %: 4 microns 90 th %: 15 microns |
|--|---|

Information presented on this Data Sheet has been compiled from sources to be reliable, and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so.



MATERIALS HEALTH, SAFETY AND ENVIRONMENTAL DATA SHEET

**MSDS#:
9300**

| | | |
|---|---|--|
| Product Identification | Product Name: INSUL-3K™ Ceramic Micro Spheres Additive Product Code #: 9300 General Usage: Additive for Paint, Coating and Film Applications General Description: Fine Powder, less than 200 um diameter C.A.S. Number: 66402-68-4 | |
| Manufacturer Information | Manufacturer's Name: Nationwide Chemical Coating Mfrs., Inc. Address: 7106 24th Court East; Sarasota, FL 34243-3993 Emergency Telephone: 1-800-423-7264 or 941-753-7500 Information: 1-800-423-7264 or 941-753-7500 Web Site: www.nationwidecoatings.com E-Mail: info@natcoat.net Date Effective: April 1 st , 2007 | |
| Chemical and Physical Properties | Color: White Physical State: Solid Boiling Point: N/A Specific Gravity: 2.1 – 2.5 g/cm ³ Vapor Presence: N/A Percent Volatile: N/A Evaporation Rate: N/A | Odor: Odorless Odor Threshold: N/A Melting Point: N/A Freezing Point: N/A Solubility in H ₂ O: N/A pH (undiluted): N/A Vapor Density: N/A |
| Fire Protection Information | Decomposition/Combustion: N/A Flash Point: N/A Recommended Extinguishing Media: N/A Flammable Limits: N/A | N/A N/A N/A N/A |
| Storage and Reactivity | Hazardous Polymerization: Will Not Occur Storage Conditions: Normal Warehouse Conditions Toxic Products Which May Form: None Known | |
| Transportation | Hazard Classes: None; Not Hazardous Hazard Labels: Not Required Hazard Determination: MSD Sheet Shipping Containers: Varies | |
| Container Labeling | Explanation of Unique Labeling System: None Used | |

| | | |
|-----------------------------------|--|---|
| Health Hazard Data | SHORT TERM EXPOSURE | |
| | Route of Entry: Inhalation: Skin: | Precautionary Treatment Expected None Expected None |
| | Eyes: | Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention. |
| | Ingestion: | Do not induce vomiting. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical attention. |
| Personal Protection | LONG TERM EXPOSURE | |
| | Carcinogen: Target Organ Effects: Other Health Hazards: | None None None Known |
| Spill or Leak Protection | Respiratory Protection: Skin Protection: | Avoid Breathing of Dust Avoid prolonged or repeated skin contact. |
| | Protective Clothing: Ventilation: Other Protective Measures: Eye Protection: | Gloves / Protective Clothing Local None Indirect Vented Goggles. |
| Treatability | Accidental Release or Spill: | Ventilate the area with fresh air. Use wet sweeping compound or water to avoid dusting. Sweep up. Clean up residue. Place in a closed container. |
| | Neutralizing Chemical/Media: | N/A |
| Recommended Waste Disposal | Waste Disposal Method: Reclaim if feasible. Dispose of waste product in a facility permitted to accept chemical waste. EPA Hazardous Waste Number (RCRA): Not regulated | |
| | Dispose of in accordance with Federal, State and Local guidelines. | |