1. Identification

Product identifier: Akardite II
Other means of identification: Not available.
Synonyms: 3-Methyl-1,1-diphenylurea
Recommended use: Industrial chemical.
Recommended restrictions: None known.

Manufacturer / Importer / Supplier / Distributor information

Manufacturer: VanDeMark Chemical Inc.
Address: 1 North Transit Road, Lockport, NY 14094 USA
Telephone: 716-433-6764
e-mail: sales@vdmchemical.com
Emergency telephone: CHEMTREC 1-800-424-9300 (North America)

2. Hazard(s) identification

Physical hazards: Not classified.
Health hazards: Not classified.
OSHA hazard(s): Not classified.

Label elements

Hazard symbol: No symbol.
Signal word: Not available.
Hazard statement: Not available.
Precautionary statement:

Prevention: Observe good industrial hygiene practices.
Response: Get medical advice/attention if you feel unwell.
Storage: Store in a closed container.
Disposal: Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC): Not classified.

3. Composition/information on ingredients

Substance

<table>
<thead>
<tr>
<th>Substance</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akardite II</td>
<td>3-Methyl-1,1-diphenylurea</td>
<td>13114-72-2</td>
<td>99</td>
</tr>
</tbody>
</table>

Composition comments: All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation: Move injured person into fresh air and keep person calm under observation. Get medical attention if any discomfort continues.
Skin contact: Rinse with water. Get medical attention promptly if symptoms persist or occur after washing.
Eye contact: Do not rub eyes. Immediately flush eye(s) with plenty of water. Remove any contact lenses and open eyelids wide apart. Get medical attention if irritation persists after washing.
Ingestion: Rinse mouth thoroughly. Get medical attention if any discomfort occurs. Only induce vomiting at the instruction of medical personnel.

Most important symptoms/effects, acute and delayed: Dusts may irritate the respiratory tract, skin and eyes.

Indication of immediate medical attention and special treatment needed: Treat symptomatically.

General information: First aid personnel must be aware of own risk during rescue.
5. Fire-fighting measures

Suitable extinguishing media
Extinguish with foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media
None.

Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters
Self-contained breathing apparatus, operated in positive pressure mode and full protective clothing must be worn in case of fire. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.

Specific methods
Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Avoid inhalation of dust. Avoid prolonged and repeated contact. Wear suitable protective clothing, gloves and eye/face protection. Keep unnecessary personnel away. See Section 8 of the MSDS for Personal Protective Equipment.

Methods and materials for containment and cleaning up
Avoid dust formation. Collect and dispose of spillage as indicated in Section 13 of the MSDS. Ventilate the area.

Environmental precautions
Do not allow to enter drains, sewers or watercourses.

7. Handling and storage

Precautions for safe handling
All handling to take place in well-ventilated area. Avoid inhalation of dust. Avoid prolonged and repeated contact. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
Provide adequate ventilation. Store in closed original container in a dry place. Keep tightly closed. Store away from incompatible materials.

8. Exposure controls/personal protection

Occupational exposure limits
No exposure limits noted for ingredient(s).

Biological limit values
No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls
Mechanical ventilation or local exhaust ventilation is required.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear approved chemical safety goggles.

Skin protection

Hand protection
Wear protective gloves. Suitable gloves can be recommended by the glove supplier.

Other
Wear appropriate clothing to prevent repeated or prolonged skin contact.

Respiratory protection
In case of inadequate ventilation or risk of inhalation of dust, use a suitable NIOSH approved respirator with an appropriate particulate filter.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance
Solid.

Physical state
Solid.

Form
Crystalline powder.

Color
White to off-white.

Odor
Odorless.

Odor threshold
Not available.

pH
Not available.

Melting point/freezing point
341.6 - 345.2 °F (172 - 174 °C)

Initial boiling point and boiling range
Not available.

Flash point
Not available.

Evaporation rate
Not applicable.

Flammability (solid, gas)
Not available.
Upper/lower flammability or explosive limits

- Flammability limit - lower (%): Not available.
- Flammability limit - upper (%): Not available.
- Explosive limit - lower (%): Not available.
- Explosive limit - upper (%): Not available.

Vapor pressure: Not applicable.
Vapor density: Not applicable.
Relative density: Not available.
Solubility(ies): Not available.
Partition coefficient (n-octanol/water): Not available.
Auto-ignition temperature: Not available.
Decomposition temperature: Not available.
Viscosity: Not available.

10. Stability and reactivity

- Reactivity: Stable at normal conditions.
- Chemical stability: Material is stable under normal conditions.
- Possibility of hazardous reactions: Will not occur.
- Conditions to avoid: Excessive heat.
- Incompatible materials: Strong oxidizing agents.

11. Toxicological information

Information on likely routes of exposure

- Ingestion: May cause discomfort if swallowed.
- Inhalation: Dust may irritate respiratory system.
- Skin contact: Dust may irritate skin.
- Eye contact: Dust in the eyes will cause irritation.

Symptoms related to the physical, chemical and toxicological characteristics: Irritation.

Information on toxicological effects

- Acute toxicity: May cause discomfort if swallowed.
- Skin corrosion/irritation: Not available.
- Serious eye damage/eye irritation: Not available.
- Respiratory sensitization: Not available.
- Skin sensitization: Not available.
- Germ cell mutagenicity: Not available.
- Carcinogenicity: Not available.
- Reproductive toxicity: Not available.
- Specific target organ toxicity - single exposure: Not available.
- Specific target organ toxicity - repeated exposure: Not available.
- Aspiration hazard: Not available.
- Further information: The toxicological properties of this material have not been fully investigated.

12. Ecological information

Ecotoxicity: The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability: Not available.
Bioaccumulative potential: Not available.
Mobility in soil: Not available.
Other adverse effects: None known.

13. Disposal considerations

Disposal instructions: Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.
Local disposal regulations: Dispose in accordance with all applicable regulations.
Hazardous waste code: Not regulated.
Waste from residues / unused products: Dispose of in accordance with local regulations. Avoid discharge into water courses or onto the ground.
Contaminated packaging: Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT: Not regulated as a hazardous material by DOT.
IATA: Not regulated as a dangerous good.
IMDG: Not regulated as a dangerous good.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: No information available.

15. Regulatory information

US federal regulations: This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard categories: Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No
SARA 302 Extremely hazardous substance: No
SARA 311/312 Hazardous chemical: No

Other federal regulations:
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List: Not regulated.
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): Not regulated.
Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number: Not listed.
Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c)): Not regulated.
DEA Exempt Chemical Mixtures Code Number: Not regulated.
Food and Drug Administration (FDA): Not regulated.
US state regulations

US. Massachusetts RTK - Substance List
Not regulated.

US. New Jersey Worker and Community Right-to-Know Act
Not regulated.

US. Pennsylvania RTK - Hazardous Substances
Not regulated.

US. Rhode Island RTK
Not regulated.

US. California Proposition 65
US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance
Not listed.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A “Yes” indicates this product complies with the inventory requirements administered by the governing country(s)

16. Other information, including date of preparation or last version

Issue date: 11-28-2012
Revision date: -
Version #: 01
Further information: Not available.
Disclaimer: This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.