Section 1. Product and company identification

Product name: DARVAN® 7-N

Code: 14395

Supplier/Manufacturer: Vanderbilt Minerals, LLC
33 Winfield Street
Norwalk, CT 06855

Synonym: Sodium polymethacrylate and water

Material uses: Dispersing agent.

Product type: Liquid.

Section 2. Hazards identification

OSHA/HCS status: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture: Not classified.

GHS label elements:
- Signal word: No signal word.
- Hazard statements: No known significant effects or critical hazards.
- Precautionary statements:
  - Prevention: Not applicable.
  - Response: Not applicable.
  - Storage: Not applicable.
  - Disposal: Not applicable.
  - Hazards not otherwise classified: None known.

Section 3. Composition/information on ingredients

Substance/mixture: Mixture

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>CAS number</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>water</td>
<td>7732-18-5</td>
<td>74 - 76</td>
</tr>
<tr>
<td>sodium polymethacrylate</td>
<td>54193-36-1</td>
<td>24 - 26</td>
</tr>
</tbody>
</table>

Occupational exposure limits, if available, are listed in Section 8.
Section 4. First aid measures

Description of necessary first aid measures

Eye contact  Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation  Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact  Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion  Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact  No known significant effects or critical hazards.

Inhalation  No known significant effects or critical hazards.

Skin contact  No known significant effects or critical hazards.

Ingestion  No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact  No specific data.

Inhalation  No specific data.

Skin contact  No specific data.

Ingestion  No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician  Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments  No specific treatment.

Protection of first-aiders  No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media  Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media  None known.

Specific hazards arising from the chemical  In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products  Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides
# Section 5. Fire-fighting measures

| Special protective actions for fire-fighters | Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. |
| Special protective equipment for fire-fighters | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |
| Remark | When water has evaporated, the residue will burn. Containers may explode (due to build-up of pressure) when exposed to extreme heat. |

# Section 6. Accidental release measures

## Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel**

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

**For emergency responders**

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions**

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

## Methods and materials for containment and cleaning up

### Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

### Large spill

Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# Section 7. Handling and storage

## Precautions for safe handling

**Protective measures**

Put on appropriate personal protective equipment (see Section 8).

**Advice on general occupational hygiene**

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities**

Store between the following temperatures: 5 to 38°C (41 to 100.4°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

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Date of previous issue: 1/9/2015  
3/10
Section 7. Handling and storage

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Appropriate engineering controls

Environmental exposure controls

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. Recommended: splash goggles

Skin protection

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: lab coat

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Personal protective equipment (Pictograms)
Section 9. Physical and chemical properties

**Appearance**
- **Physical state**: Liquid.
- **Color**: Colorless.
- **Odor**: None.
- **Odor threshold**: Not available.
- **pH**: 9 to 11.5
- **Melting point**: Not available.
- **Boiling point**: >100°C (>212°F)
- **Flash point**: Closed cup: >93°C (>199.4°F) [Pensky-Martens.]
- **Burning time**: Not applicable.
- **Burning rate**: Not applicable.
- **Evaporation rate**: <1 (butyl acetate = 1)
- **Flammability (solid, gas)**: When water has evaporated, the residue will burn. Containers may explode (due to build-up of pressure) when exposed to extreme heat.
- **Lower and upper explosive (flammable) limits**: Not available.
- **Vapor pressure**: Not available.
- **Vapor density**: >1 [Air = 1]
- **Density**: 1.13 to 1.17 g/cm³
- **Relative density**: 1.13 to 1.17
- **Solubility**: Soluble in the following materials: cold water.
- **Solubility in water**: Not available.
- **Partition coefficient: n-octanol/water**: Not available.
- **Auto-ignition temperature**: Not available.
- **Decomposition temperature**: Not available.
- **SADT**: Not available.
- **Viscosity**: Dynamic (room temperature): <75 mPa·s (<75 cP)

Section 10. Stability and reactivity

**Reactivity**
- No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability**
- The product is stable.

**Possibility of hazardous reactions**
- Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid**
- Avoid excessive temperatures.

**Incompatible materials**
- oxidizing agents

**Hazardous decomposition products**
- Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Section 11. Toxicological information

**Information on toxicological effects**

**Acute toxicity**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>DARVAN® 7-N</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>&gt;5000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>&gt;20000 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

**Irritation/Corrosion**
Not available.

**Conclusion/Summary**
- **Skin**: May cause skin irritation. (Primary skin irritation index (rabbits): 0.25)
- **Eyes**: Non-irritating to the eyes. (Rabbit)

**Sensitization**
Not available.

**Mutagenicity**
Not available.

**Carcinogenicity**
Not available.

**Reproductive toxicity**
Not available.

**Teratogenicity**
Not available.

**Specific target organ toxicity (single exposure)**
Not available.

**Specific target organ toxicity (repeated exposure)**
Not available.

**Aspiration hazard**
Not available.

**Information on the likely routes of exposure**
Routes of entry anticipated: Dermal, Inhalation.

**Potential acute health effects**
- **Eye contact**: No known significant effects or critical hazards.
- **Inhalation**: No known significant effects or critical hazards.
- **Skin contact**: No known significant effects or critical hazards.
- **Ingestion**: No known significant effects or critical hazards.

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Section 11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact  No specific data.
Inhalation  No specific data.
Skin contact  No specific data.
Ingestion  No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects  Not available.
Potential delayed effects  Not available.

Long term exposure

Potential immediate effects  Not available.
Potential delayed effects  Not available.

Potential chronic health effects

Not available.

General  No known significant effects or critical hazards.
Carcinogenicity  No known significant effects or critical hazards.
Mutagenicity  No known significant effects or critical hazards.
Teratogenicity  No known significant effects or critical hazards.
Developmental effects  No known significant effects or critical hazards.
Fertility effects  No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Other information  Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil
Section 12. Ecological information

Other adverse effects
No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods
The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14. Transport information

<table>
<thead>
<tr>
<th>Regulatory information</th>
<th>UN number</th>
<th>Proper shipping name</th>
<th>Classes</th>
<th>PG*</th>
<th>Label</th>
<th>Additional information</th>
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</thead>
<tbody>
<tr>
<td>DOT Classification</td>
<td>Not regulated.</td>
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<tr>
<td>TDG Classification</td>
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<tr>
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<tr>
<td>IMDG Class</td>
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<tr>
<td>IATA-DGR Class</td>
<td>Not regulated.</td>
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</tbody>
</table>

PG* : Packing group

Section 15. Regulatory information

United States inventory (TSCA 8b)
All components are listed or exempted.

U.S. Federal regulations

TSCA 8(a) CDR Exempt/Partial exemption: All components are listed or exempted.

SARA 302/304
Composition/information on ingredients
No products were found.

SARA 311/312
Classification
Not applicable.

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Section 15. Regulatory information

Composition/information on ingredients
No products were found.

State regulations
Massachusetts None of the components are listed.
New York None of the components are listed.
New Jersey None of the components are listed.
Pennsylvania None of the components are listed.
California Prop. 65 None of the components are listed.

International regulations
Europe inventory All components are listed or exempted.
Canada inventory All components are listed or exempted.
Australia inventory (AICS) All components are listed or exempted.
China inventory (IECSC) All components are listed or exempted.
Japan inventory (ENCS) All components are listed or exempted.
Korea inventory (KECI) All components are listed or exempted.
New Zealand Inventory of Chemicals (NZIoC) All components are listed or exempted.
Philippines inventory (PICCS) All components are listed or exempted.

Section 16. Other information

Hazardous Material Identification System (U.S.A.)

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health Health
Flammability
Instability/Reactivity
Special

History
Date of printing 4/5/2016
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Version 2.01

Key to abbreviations
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
Section 16. Other information

UN = United Nations

References
Not available.

Information contact
Vanderbilt Global Services, LLC
Corporate Risk Management
1-203-295-2143

Visit www.vanderbiltminerals.com for more information.

Notice to reader

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