1. Identification

1.1. Product identifier

Product Identity: 321 K-NRG Seal VP
Alternate Names: 321 K-NRG Seal VP

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use: See Technical Data Sheet.
Application Method: See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name: Karnak Corporation
330 Central Ave.
Clark, NJ 07066 USA

Emergency
CHEMTREC (USA): (800) 424-9300
24 hour Emergency Telephone No.: OUTSIDE THE U.S AND CANADA 1-202-483-7616
Customer Service: Karnak Corporation 1-800-526-4236

2. Hazard(s) identification

2.1. Classification of the substance or mixture
Carc. 2;H351 Suspected of causing cancer.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

Warning

H351 Suspected of causing cancer.

[Prevention]:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P281 Use personal protective equipment as required.

[Response]:
P308+313 IF exposed or concerned: Get medical advice / attention.
3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

<table>
<thead>
<tr>
<th>Ingredient/Chemical Designations</th>
<th>Weight %</th>
<th>GHS Classification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acrylic Emulsion</td>
<td>50 - 75</td>
<td>Not Classified</td>
<td>[1]</td>
</tr>
<tr>
<td>Calcium carbonate</td>
<td>10 - 25</td>
<td>Not Classified</td>
<td>[1][2]</td>
</tr>
<tr>
<td>Graphite</td>
<td>5 - 10</td>
<td>Combustible Dust</td>
<td>[1][2]</td>
</tr>
<tr>
<td>Propylene Glycol</td>
<td>1 - 5</td>
<td>Asp. Tox. 1;H304</td>
<td>[1]</td>
</tr>
<tr>
<td>Cellulose</td>
<td>1 - 5</td>
<td>Not Classified</td>
<td>[1][2]</td>
</tr>
<tr>
<td>Magnesium aluminium silicate</td>
<td>1 - 5</td>
<td>Not Classified</td>
<td>[1]</td>
</tr>
<tr>
<td>Benzophenone</td>
<td>0.10 - 1.0</td>
<td>Carc. 2;H351 Aquatic Chronic 3;H412</td>
<td>[1]</td>
</tr>
</tbody>
</table>

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

**General**

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

**Inhalation**

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

**Eyes**

Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

**Skin**

Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

**Ingestion**

If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.
4.2. Most important symptoms and effects, both acute and delayed

Overview
No specific symptom data available.
Possible cancer hazard. Contains an ingredient which may cause cancer based on animal data (See Section 3 and Section 15 for each ingredient). Risk of cancer depends on duration and level of exposure.
See section 2 for further details.

5. Fire-fighting measures

5.1. Extinguishing media
Recommended extinguishing media; alcohol resistant foam, CO₂, powder, water spray.
Do not use: water jet.

5.2. Special hazards arising from the substance or mixture
Hazardous decomposition: No hazardous decomposition data available.

5.3. Advice for fire-fighters
None
ERG Guide No. ----

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions
Do not allow spills to enter drains or waterways.
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up
Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8.

Contain and absorb spillage with non-combustible materials e.g. sand, earth, and vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations. (See section 13).

7. Handling and storage

7.1. Precautions for safe handling
See section 2 for further details. - [Prevention]:
7.2. Conditions for safe storage, including any incompatibilities
Keep product from freezing.
Handle containers carefully to prevent damage and spillage.
Incompatible materials: No data available.
See section 2 for further details.

7.3. Specific end use(s)
No data available.

8. Exposure controls and personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Exposure</th>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0000057-55-6</td>
<td>Propylene Glycol</td>
<td>OSHA</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ACGIH</td>
<td>TWA(Aerosol): 10 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NIOSH</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Supplier</td>
<td>10 mg/m³ TWA (listed as AIHA WEEL)</td>
</tr>
<tr>
<td></td>
<td>0001317-65-3</td>
<td>Calcium carbonate</td>
<td>OSHA</td>
<td>TWA 15 mg/m³ (total) TWA 5 mg/m³ (resp)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ACGIH</td>
<td>TWA: 10 mg/m³ Ceiling: 20 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NIOSH</td>
<td>TWA 10 mg/m³ (total) TWA 5 mg/m³ (resp)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Supplier</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td>0007782-42-5</td>
<td>Graphite</td>
<td>OSHA</td>
<td>TWA 15 mg/m³ TWA 15 mppcf</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ACGIH</td>
<td>TWA: 2 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NIOSH</td>
<td>TWA 2.5 mg/m³ (resp)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Supplier</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td>0009004-34-6</td>
<td>Cellulose</td>
<td>OSHA</td>
<td>TWA 10 mg/m³ (total) TWA 5 mg/m³ (resp)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ACGIH</td>
<td>TWA: 10 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NIOSH</td>
<td>TWA 10 mg/m³ (total) TWA 5 mg/m³ (resp)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Supplier</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td>0012174-11-7</td>
<td>Magnesium aluminium silicate</td>
<td>OSHA</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ACGIH</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NIOSH</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Supplier</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td>Proprietary</td>
<td>Acrylic Emulsion</td>
<td>OSHA</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ACGIH</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NIOSH</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Supplier</td>
<td>No Established Limit</td>
</tr>
</tbody>
</table>
8.2. Exposure controls

Respiratory If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

Eyes Protective safety glasses recommended

Skin Neoprene gloves

Engineering Controls Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Black Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight ammonia</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH</td>
<td>9.0</td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>212F</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Evaporation rate (Ether = 1)</td>
<td>(Butyl Acetate=1) @77 F : &gt;1</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Lower Explosive Limit: Not Measured</td>
</tr>
<tr>
<td></td>
<td>Upper Explosive Limit: Not Measured</td>
</tr>
<tr>
<td>Vapor pressure (Pa)</td>
<td>@77F 23.77mm of Hg</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>(Air=1) :&gt;1</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>(H2O=1):1.10 -1.45</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Soluble</td>
</tr>
<tr>
<td>Partition coefficient n-octanol/water (Log Kow)</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Viscosity (cSt)</td>
<td>Not Measured</td>
</tr>
</tbody>
</table>

9.2. Other information
No other relevant information.
10. Stability and reactivity

10.1. Reactivity
Hazardous Polymerization will not occur.

10.2. Chemical stability
Stable under normal circumstances.

10.3. Possibility of hazardous reactions
No data available.

10.4. Conditions to avoid
No data available.

10.5. Incompatible materials
No data available.

10.6. Hazardous decomposition products
No hazardous decomposition data available.

11. Toxicological information

Acute toxicity

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Oral LD50, mg/kg</th>
<th>Skin LD50, mg/kg</th>
<th>Inhalation Vapor LC50, mg/L/4hr</th>
<th>Inhalation Dust/Mist LC50, mg/L/4hr</th>
<th>Inhalation Gas LC50, ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acrylic Emulsion - (Proprietary)</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Calcium carbonate - (1317-65-3)</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Graphite - (7782-42-5)</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Propylene Glycol - (57-55-6)</td>
<td>20,000.00, Rat - Category: NA</td>
<td>20,800.00, Rabbit - Category: NA</td>
<td>105.00, Rat - Category: NA</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Cellulose - (9004-34-6)</td>
<td>&gt; 5,000.00, Rat - Category: NA</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Magnesium aluminium silicate - (12174-11-7)</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category</th>
<th>Hazard Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (oral)</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>
Acute toxicity (dermal) | --- | Not Applicable
Acute toxicity (inhalation) | --- | Not Applicable
Skin corrosion/irritation | --- | Not Applicable
Serious eye damage/irritation | --- | Not Applicable
Respiratory sensitization | --- | Not Applicable
Skin sensitization | --- | Not Applicable
Germ cell mutagenicity | --- | Not Applicable
Carcinogenicity | 2 | Suspected of causing cancer.
Reproductive toxicity | --- | Not Applicable
STOT-single exposure | --- | Not Applicable
STOT-repeated exposure | --- | Not Applicable
Aspiration hazard | --- | Not Applicable

12. Ecological information

12.1. Toxicity
No additional information provided for this product. See Section 3 for chemical specific data.
Aquatic Ecotoxicity

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>96 hr LC50 fish, mg/l</th>
<th>48 hr EC50 crustacea, mg/l</th>
<th>ErC50 algae, mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acrylic Emulsion - (Proprietary)</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Calcium carbonate - (1317-65-3)</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Graphite - (7782-42-5)</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Propylene Glycol - (57-55-6)</td>
<td>40,613.00, Oncorhynchus mykiss</td>
<td>18,340.00, Ceriodaphnia dubia</td>
<td>19,000.00 (96 hr), Pseudokirchneriella subcapitata</td>
</tr>
<tr>
<td>Cellulose - (9004-34-6)</td>
<td>100.00, Fish (Piscis)</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Magnesium aluminium silicate - (12174-11-7)</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
There is no data available on the preparation itself.

12.3. Bioaccumulative potential
Not Measured

12.4. Mobility in soil
No data available.

12.5. Results of PBT and vPvB assessment
This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects
No data available.

13. Disposal considerations

13.1. Waste treatment methods
Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

The description shown may not apply to all shipping situations. Consult 49 CFR, or appropriate regulations, for additional description requirements.

DOT Shipping Name: NON-Regulated
DOT Label Information: NA
DOT Hazard Class: NA
DOT Packing Group: NA
15. Regulatory information

Regulatory Overview  The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA)  All components of this material are either listed or exempt from listing on the TSCA Inventory.

WHMIS Classification  D2A

US EPA Tier II Hazards  

Fire: No
Sudden Release of Pressure: No
Reactive: No
Immediate (Acute): No
Delayed (Chronic): Yes

EPCRA 311/312 Chemicals and RQs:  To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 302 Extremely Hazardous:  To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:  To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):  
Benzophenone
Magnesium aluminium silicate

Proposition 65 - Developmental Toxins (>0.0%):  To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):  To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):  To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):  
Cellulose
Graphite
Calcium carbonate
Propylene Glycol

Pennsylvania RTK Substances (>1%):  
Cellulose
Graphite
Calcium carbonate
Propylene Glycol
16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:
H304 May be fatal if swallowed and enters airways.
H351 Suspected of causing cancer.
H412 Harmful to aquatic life with long lasting effects.

Disclaimer: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The information has been completed to the best of our knowledge and is believed to be accurate and reliable as from the date indicated. However, no warranty is made as to its accuracy, reliability or completeness. It is the user’s responsibility to satisfy oneself as to the suitability and completeness of such information for his own particular use.

End of Document