SAFETY DATA SHEET

1. Identification

Product identifier DRAMM BLEND VK-1
Other means of identification None.
Recommended use ALL PROPER AND LEGAL PURPOSES
Recommended restrictions None known.
Manufacturer/Importer/Supplier/Distributor information
Manufacturer
- Company name: Brenntag Great Lakes, Inc.
- Address: 4420 N. Harley Davidson Ave Suite A
  Wauwatosa, WI 53225
- Telephone: 262-252-3550
- E-mail: Not available.
- Emergency phone number: 800-424-9300 CHEMTREC

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards
- Acute toxicity, oral Category 4
- Skin corrosion/irritation Category 2
- Serious eye damage/eye irritation Category 2A
- Carcinogenicity Category 2
- Specific target organ toxicity, repeated exposure Category 2
Environmental hazards Not classified.
OSHA defined hazards Not classified.
Label elements

Signal word Warning
Hazard statement Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.
Precautionary statement
Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear eye protection/face protection. Wear protective gloves/protective clothing/eye protection/face protection.
Response If swallowed: Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Rinse mouth. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Storage Store locked up.
Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC) Combustible.
Supplemental information 14.13% of the mixture consists of component(s) of unknown acute oral toxicity.

3. Composition/information on ingredients

Mixtures
4. First-aid measures

Inhalation  Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact  Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact  Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion  Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn’t get into the lungs. Get medical advice/attention if you feel unwell.

Most important symptoms/effects, acute and delayed  Dizziness. Nausea. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed  Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information  IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media  Foam. Dry chemicals. Carbon dioxide (CO2).

Unsuitable extinguishing media  Do not use water jet as an extinguisher, as this will spread the fire.

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 and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions  Cool containers exposed to heat with water spray and remove container, if no risk is involved.

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

General fire hazards  Combustible. No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures  Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up  Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g., cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions  Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

7. Handling and storage

Precautions for safe handling  Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated contact with skin. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.
8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHANE, DICHLORO- (CAS 75-09-2)</td>
<td>STEL</td>
<td>125 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>25 ppm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. ACGIH Threshold Limit Values Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHANE, DICHLORO- (CAS 75-09-2)</td>
<td>TWA</td>
<td>50 ppm</td>
</tr>
</tbody>
</table>

Biological limit values

<table>
<thead>
<tr>
<th>ACGIH Biological Exposure Indices Components</th>
<th>Value</th>
<th>Determinant</th>
<th>Specimen</th>
<th>Sampling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHANE, DICHLORO- (CAS 75-09-2)</td>
<td>0.3 mg/l</td>
<td>Dichloromethane</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* - For sampling details, please see the source document.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection
Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Hand protection
Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other
Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection
Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations
Keep away from food and drink. 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

Physical state
Liquid.

Form
Liquid.

Color
NOT LISTED

Odor
NOT LISTED

Odor threshold
Not available.

pH
Not available.

Melting point/freezing point
-138.97 °F (-94.98 °C) estimated / 999 °F (537.22 °C)

Initial boiling point and boiling range
103.55 °F (39.75 °C) estimated

Flash point
351.0 °F (177.2 °C)

Evaporation rate
Not available.

Flammability (solid, gas)
Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower
15.5 % estimated
Flammability limit - upper (%) 66.4 % estimated
Explosive limit - lower (%) Not available.
Explosive limit - upper (%) Not available.
Vapor pressure 579.88 hPa estimated
Vapor density Not available.
Relative density Not available.
Solubility(ies)
Solubility (water) Not available.
Partition coefficient (n-octanol/water) Not available.
Auto-ignition temperature 1033 °F (556.11 °C) estimated
Decomposition temperature Not available.
Viscosity Not available.

Other information
Density 11.06 lbs/gal estimated
Explosive properties Not explosive.
Flammability class Combustible IIIB estimated
Oxidizing properties Not oxidizing.
Percent volatile 85.87 % estimated
Specific gravity 1.33 estimated
VOC (Weight %) 85.87 % estimated

10. Stability and reactivity
Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability Material is stable under normal conditions.
Possibility of hazardous reactions Hazardous polymerization does not occur.
Conditions to avoid Contact with incompatible materials.
Incompatible materials Strong oxidizing agents.
Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information
Information on likely routes of exposure
Inhalation May cause damage to organs through prolonged or repeated exposure by inhalation.
Skin contact Causes skin irritation.
Eye contact Causes serious eye irritation.
Ingestion Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics
Dizziness. Nausea. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Information on toxicological effects
Acute toxicity Harmful if swallowed.

Components | Species | Test Results
--- | --- | ---
METHANE, DICHLORO- (CAS 75-09-2)
Acute Inhalation
LC50 | Guinea pig | 11600 ppm, 6 Hours
 | | 40.2 mg/l, 6 Hours
 | Mouse | 14400 ppm, 7 Hours
 | | 56.23 mg/l, 7 Hours
<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rat</td>
<td></td>
<td>51.5 mg/l, 2 Hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>49.1 mg/l, 6 Hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2000 mg/l, 15 Minutes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>88 mg/l, 900 Days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>79 mg/l, 2 Hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>52 mg/l, 6 Hours</td>
</tr>
<tr>
<td>LD50</td>
<td>Mouse</td>
<td>16000 ppm, 7 Hours</td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>1600 mg/kg</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation**
Causes skin irritation.

**Serious eye damage/eye irritation**
Causes serious eye irritation.

**Respiratory or skin sensitization**
- **Respiratory sensitization**: Not a respiratory sensitizer.
- **Skin sensitization**: This product is not expected to cause skin sensitization.

**Germ cell mutagenicity**
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**
Suspected of causing cancer.

**IARC Monographs. Overall Evaluation of Carcinogenicity**
METHANE, DICHLOORO- (CAS 75-09-2) 2A Probably carcinogenic to humans.

METHANE, DICHLOORO- (CAS 75-09-2) Cancer

**US. National Toxicology Program (NTP) Report on Carcinogens**
METHANE, DICHLOORO- (CAS 75-09-2) Reasonably Anticipated to be a Human Carcinogen.

**Reproductive toxicity**
This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure**
Not classified.

**Specific target organ toxicity - repeated exposure**
May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard**
Not an aspiration hazard.

**Chronic effects**
May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

### 12. Ecological information

**Ecotoxicity**
The product is 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.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHANE, DICHLOORO- (CAS 75-09-2)</td>
<td>Aquatic</td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Water flea (Daphnia magna) 1250 mg/l, 48 hours</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fathead minnow (Pimephales promelas) 140.8 - 277.8 mg/l, 98 hours</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

**Persistence and degradability**
No data is available on the degradability of this product.

**Bioaccumulative potential**
- **Partition coefficient n-octanol / water (log Kow)**
  METHANE, DICHLOORO- 1.25

**Mobility in soil**
No data available.

**Other adverse effects**
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
13. Disposal considerations

Disposal instructions  Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations  Dispose in accordance with all applicable regulations.

Hazardous waste code  The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products  Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging  Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number  UN1593
UN proper shipping name  DICHLOOROMETHANE MIXTURE
Transport hazard class(es)  
   Class  6.1
   Subsidiary risk  -
   Packing group  III
Special precautions for user  Read safety instructions, SDS and emergency procedures before handling.
ERG number  160
DOT information on packaging may be different from that listed.

15. Regulatory information

US federal regulations  This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. One or more components are not listed on TSCA.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)  Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)  METHANE, DICHLOORO- (CAS 75-09-2)  Listed.

SARA 304 Emergency release notification  Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)  METHANE, DICHLOORO- (CAS 75-09-2)  Cancer
Heart
Central nervous system
Liver
Skin irritation
Eye irritation

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories  Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No
SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
No

SARA 313 (TRI reporting)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>% by wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHANE, DICHLORO-</td>
<td>75-09-2</td>
<td>85.8713</td>
</tr>
</tbody>
</table>

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
  METHANE, DICHLORO-(CAS 75-09-2)

Clean Air Act (CAA) Section 112(t) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))
  METHANE, DICHLORO-(CAS 75-09-2)

US. Massachusetts RTK - Substance List
  METHANE, DICHLORO-(CAS 75-09-2)

US. New Jersey Worker and Community Right-to-Know Act
  METHANE, DICHLORO-(CAS 75-09-2)

US. Pennsylvania Worker and Community Right-to-Know Law
  METHANE, DICHLORO-(CAS 75-09-2)

US. Rhode Island RTK
  METHANE, DICHLORO-(CAS 75-09-2)

US. California Proposition 65
WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance
  METHANE, DICHLORO-(CAS 75-09-2) Listed: April 1, 1988

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>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>No</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>No</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>No</td>
</tr>
</tbody>
</table>

* "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).
* "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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

Issue date 03-30-2015
Revision date 05-09-2015
Version # 02
HMIS® ratings

Health: 2*
Flammability: 0
Physical hazard: 0

NFPA ratings

Health: 2
Flammability: 0
Instability: 0

Disclaimer

BNA cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

Revision Information

Hazard(s) identification: Prevention
Physical and chemical properties: Color
Physical and chemical properties: Oxidizing properties
Physical and chemical properties: Odor
Physical and chemical properties: Explosive properties