SAFETY DATA SHEET

1. Identification

Product identifier: Brandt Saf-T-Foliage Dip

Other means of identification

Product code: 15034

Recommended use: Horticultural Use-Refer to product label

Recommended restrictions: Refer to product label.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name: Brandt Consolidated, Inc.
Address: 2935 South Koke Mill Road
Springfield, IL 62711
United States

Telephone: Corporate Office 1-217-547-5800
Website: www.brandt.co
E-mail: msds@brandt.co
Contact person: EH&S / Regulatory Department

Emergency phone number

CHEMTREC (24 hours):
USA, Canada, Puerto Rico 1-800-424-9300
Virgin Islands 1-800-424-9300
International Maritime +1 (703) 527-3887

2. Hazard(s) identification

Physical hazards: Not classified.

Health hazards: Acute toxicity, inhalation Category 4

Environmental hazards: Not classified.

OSHA defined hazards: Not classified.

Label elements

Signal word: Warning

Hazard statement: Harmful if inhaled.

Precautionary statement

Prevention: Avoid breathing vapors. Use only outdoors or in a well-ventilated area.

Response: If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.

Storage: Store away from incompatible materials.

Disposal: Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental information: None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum Oil, Paraffinic</td>
<td></td>
<td>64742-55-8</td>
<td>80 - 90*</td>
</tr>
</tbody>
</table>

Material name: Brandt Saf-T-Foliage Dip
15034    Version #: 01    Issue date: 01-04-2017
### 4. First-aid measures

**Inhalation**
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.

**Skin contact**
Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact**
Rinse with water. Get medical attention if irritation develops and persists.

**Ingestion**
Direct contact with eyes may cause temporary irritation. Most important symptoms/effects, acute and delayed
Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

**Indication of immediate medical attention and special treatment needed**
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire-fighting measures

**Suitable extinguishing media**
Water fog. Foam. Dry chemical powder. 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**
Move containers from fire area if you can do so without risk.

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

**General fire hazards**
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. Avoid inhalation of vapors and spray mists. 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**
This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. 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.

**Avoid discharge into drains, water courses or onto the ground.**

### 7. Handling and storage

**Precautions for safe handling**
Avoid inhalation of vapors and spray mists. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**
Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).
8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum Oil, Paraffinic (CAS 64742-55-8)</td>
<td>PEL</td>
<td>5 mg/m³</td>
<td>Mist.</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
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<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum Oil, Paraffinic (CAS 64742-55-8)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum Oil, Paraffinic (CAS 64742-55-8)</td>
<td>STEL</td>
<td>10 mg/m³</td>
<td>Mist.</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Mist.</td>
</tr>
</tbody>
</table>

US. AIHA Workplace Environmental Exposure Level (WEEL) Guides

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly(ethylene oxide) (CAS 25322-68-3)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Particulate.</td>
</tr>
</tbody>
</table>

Biological limit values

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

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.

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 suitable protective clothing.

Respiratory protection

Chemical respirator with organic vapor cartridge and full facepiece.

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

Viscous.

Physical state

Liquid.

Form

Liquid.

Color

White

Odor

Ammonia

Odor threshold

Not available.

pH

Not available.

Melting point/freezing point

Not available.

Initial boiling point and boiling range

680 °F (360 °C)

Flash point

> 212.0 °F (> 100.0 °C)

Evaporation rate

Not available.

Flammability (solid, gas)

Not applicable.

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 0.00001 hPa estimated
Vapor density Not available.
Relative density 0.86 g/cm³ (typical)
Solubility(ies)
  Solubility (water) Dispersable
Partition coefficient (n-octanol/water) Not available.
Auto-ignition temperature Not available.
Decomposition temperature Not available.
Viscosity Not available.
Other information
  Density 0.87 g/cm³ estimated
  Explosive properties Not explosive.
  Flammability class Combustible IIIB estimated
  Oxidizing properties Not oxidizing.
  Percent volatile 15.27 % estimated
  pH in aqueous solution 7 - 9 (1% dilution)
  Pounds per gallon 7.17 lb/gal (typical)
  VOC 0.01 % 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 No dangerous reaction known under conditions of normal use.
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 Harmful if inhaled.
  Skin contact No adverse effects due to skin contact are expected.
  Eye contact Direct contact with eyes may cause temporary irritation.
  Ingestion Expected to be a low ingestion hazard.
  Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects
  Acute toxicity Harmful if inhaled.

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<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
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<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>&gt; 2000 mg/kg</td>
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<td></td>
<td>2387 mg/kg estimated</td>
</tr>
<tr>
<td>LD50 Rat</td>
<td></td>
<td>2000 mg/kg</td>
</tr>
<tr>
<td>LD50 Rat Liquid</td>
<td></td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>LC50 Rat Liquid</td>
<td></td>
<td>&gt; 5.53 mg/l, 4 hours</td>
</tr>
<tr>
<td>LD50 Rat Oral</td>
<td></td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>LD50 Rat Oral Liquid</td>
<td></td>
<td>&gt; 2.06 mg/l, 4 hours No mortality</td>
</tr>
<tr>
<td>LD50 Rat Oral Liquid</td>
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Components

Petroleum Oil, Paraffinic (CAS 64742-55-8)

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

Skin corrosion/irritation

Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation

Direct contact with eyes may cause temporary 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

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

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

Not classified.

Aspiration hazard

Not an aspiration hazard.

Chronic effects

Prolonged inhalation may be harmful.

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.

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<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic Crustacea</td>
<td>EC50</td>
<td>119.3602 mg/l, 48 hours estimated</td>
</tr>
<tr>
<td>Aquatic Fish</td>
<td>LC50</td>
<td>119.3602 mg/l, 96 hours estimated</td>
</tr>
</tbody>
</table>

Material name: Brandt Saf-T-Foliage Dip

15034  Version #: 01  Issue date: 01-04-2017
Components Test Results

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<td>LC50</td>
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<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
</tr>
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</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 | No data available.
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 | Not regulated as dangerous goods.
IATA | Not regulated as dangerous goods.
IMDG | Not regulated as dangerous goods.

15. Regulatory information

US federal regulations | This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) | Not regulated.
CERCLA Hazardous Substance List (40 CFR 302.4) | Not listed.
SARA 304 Emergency release notification | Not regulated.
Superfund Amendments and Reauthorization Act of 1986 (SARA) | Immediate Hazard - Yes
Hazard categories | Delayed Hazard - No
| 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)
Not regulated.

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.
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))
Petroleum Oil, Paraffinic (CAS 64742-55-8)
US. Massachusetts RTK - Substance List
Petroleum Oil, Paraffinic (CAS 64742-55-8)
US. New Jersey Worker and Community Right-to-Know Act
Not listed.
US. Pennsylvania Worker and Community Right-to-Know Law
Petroleum Oil, Paraffinic (CAS 64742-55-8)
US. Rhode Island RTK
Not regulated.
US. California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

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>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</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>Yes</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>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<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 that all components of this product comply with the inventory requirements administered by the governing country(s)
A "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 01-04-2017
Version # 01
Disclaimer
The information provided in this Safety Data Sheet is correct to the best of Manufacturer’s knowledge, information and belief at the date of its publication; however, it is provided only as a guidance for safe handling, use, processing, storage, transportation, disposal and release of the Product. No warranties of any kind, either expressed or implied, including warranties of merchantability or fitness for a particular purpose, are made with respect to the Product or the information provided herein, or that the Product or information herein may be used without infringing the intellectual property rights of others. The information provided in this Safety Data Sheet relates only to the specific Product designated and may not be valid if the Product is used in combination with other materials or in any other process, unless specified herein. The user assumes all risk and liability for loss, injury, damage or expense due to any use, handling, storage or disposal of the Product, and Manufacturer recommends that the user conducts its own tests of the Product to determine suitability of the Product for user’s particular use.

Revision information
Product and Company Identification: Product Registration Numbers
Physical & Chemical Properties: Multiple Properties
Toxicological Information: Toxicological Data
Regulatory information: Hazard statement
Regulatory information: FIFRA Information