SAFETY DATA SHEET



1. Identification

Product identifier Brandt Drip-Rite 6000

Other means of identification

Product code 50004

Recommended use Agricultural/ Horticultural Use- Water Treatment- Refer to product label.

Recommended restrictions Refer to product label.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company nameBrandt Consolidated, Inc.Address2935 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 Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Causes skin irritation. Causes serious eye irritation.

Precautionary statement

Prevention Wash thoroughly after handling. Wear protective gloves. Wear eye/face protection.

Response 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. Specific treatment (see this label). 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 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

Material name: Brandt Drip-Rite 6000

Chemical name	Common name and synonyms	CAS number	%
Ethanedioic acid		144-62-7	5 - < 10*
Other components below reportate		90 - 100	

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

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

and pain. Severe eye irritation.

Symptoms may be delayed.

Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get Skin contact

medical advice/attention. Wash contaminated clothing before reuse.

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause redness

Rinse mouth. Get medical attention if symptoms occur. Ingestion

Most important

symptoms/effects, acute and

delayed Indication of immediate

medical attention and special

treatment needed **General information** Provide general supportive measures and treat symptomatically. Keep victim under observation.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Specific hazards arising from

the chemical Special protective equipment

and precautions for firefighters

Fire-fighting equipment/instructions

Specific methods General fire hazards Move containers from fire area if you can do so without risk.

During fire, gases hazardous to health may be formed.

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Do not use water jet as an extinguisher, as this will spread the fire.

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

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

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. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. 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.

Never return spills to original containers for re-use. Prevent entry into waterways, sewer, basements or confined areas. For waste disposal, see section 13 of the SDS.

Environmental precautions

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

7. Handling and storage

Precautions for safe handling

Avoid contact with eyes. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store in original tightly closed container. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).

Material name: Brandt Drip-Rite 6000 SDS US

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	
Ethanedioic acid (CAS 144-62-7)	PEL	1 mg/m3	
US. ACGIH Threshold Limit Valu	ies		
Components	Туре	Value	
Ethanedioic acid (CAS 144-62-7)	STEL	2 mg/m3	
,	TWA	1 mg/m3	
US. NIOSH: Pocket Guide to Ch	emical Hazards		
Components	Туре	Value	
Ethanedioic acid (CAS 144-62-7)	STEL	2 mg/m3	

Biological limit valuesNo biological exposure limits noted for the ingredient(s).

TWA

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.

1 mg/m3

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.Other Wear appropriate chemical resistant clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. Respiratory protection not

required.

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 Liquid.
Physical state Liquid.
Form Liquid.

Color Clear colorless or nearly colorless

Odor None.

Odor threshold Not available.

pH Acidic

Salt-Out / Crystallization Temp Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling 213.8 °F (101 °C)

range

Flash point 315.0 °F (157.2 °C) estimated

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper Not available.

(%)

Material name: Brandt Drip-Rite 6000

Explosive limit - lower (%) Not available. Not available. Explosive limit - upper (%) Not available. Vapor pressure Vapor density Not available. Relative density Not available.

Solubility(ies)

Solubility (water) 100 %

Partition coefficient

Not available.

(n-octanol/water)

Auto-ignition temperature Not available. Not available. **Decomposition temperature Viscosity** Not available.

Other information

Density 8.70 lb/gal estimated Combustible IIIB estimated Flammability class

pH in aqueous solution 1.5 1% Solution

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Material is stable under normal conditions. **Chemical stability** Possibility of hazardous Hazardous polymerization does not occur.

reactions

Conditions to avoid Avoid temperatures exceeding the flash point. 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

Expected to be a low ingestion hazard. Ingestion Inhalation Prolonged inhalation may be harmful.

Causes skin irritation. Skin contact

Eye contact Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation.

Severe eye irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity

Product Test Results Species

Brandt Drip-Rite 6000 (CAS Mixture)

Acute Oral

LDL0

12500 mg/kg estimated

Components **Species Test Results**

Ethanedioic acid (CAS 144-62-7)

Acute Oral

LDL0 Dog 1000 mg/kg

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

Dog

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye Causes serious eye irritation.

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irritation

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicityNo 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.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicityThis 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 available.

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.

Product		Species	Test Results
Brandt Drip-Rite 6000	(CAS Mixture)		
Aquatic			
Crustacea	EC50	Daphnia	1562.5 mg/l, 48 hours estimated
Components		Species	Test Results
Ethanedioic acid (CAS	S 144-62-7)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	125 - 150 mg/l, 48 hours

^{*} 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 Not 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 instructionsCollect 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 regulationsDispose 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 Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

14. Transport information

DOT

UN number UN3265

UN proper shipping name Corrosive liquid, acidic, organic, n.o.s. (Ethanedioic acid)

Transport hazard class(es)

Class 8 Subsidiary risk -Label(s) 8

Material name: Brandt Drip-Rite 6000

SDS US

Packing group III

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions IB3, T7, TP1, TP28

Packaging exceptions 154
Packaging non bulk 203
Packaging bulk 241

IATA

UN number UN3265

UN proper shipping name Corrosive liquid, acidic, organic, n.o.s. (Ethanedioic acid)

Transport hazard class(es)

Class 8
Subsidiary risk Packing group III
Environmental hazards No.
ERG Code 8L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo Allowed.

aircraft

Cargo aircraft only Allowed.

IMDG

UN number UN3265

UN proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Ethanedioic acid)

Transport hazard class(es)

Class 8
Subsidiary risk Packing group III
Environmental bazards

Environmental hazards

 $\begin{tabular}{ll} \mbox{Marine pollutant} & \mbox{No.} \\ \mbox{EmS} & \mbox{F-A, S-B} \\ \end{tabular}$

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

DOT



IATA; IMDG



15. Regulatory information

US federal regulationsThis product is not known to be 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)

Ethanedioic acid (CAS 144-62-7) 1.0 % One-Time Export Notification only.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No

chemical

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

Not regulated.

(SDWA)

US state regulations

US. Massachusetts RTK - Substance List

Ethanedioic acid (CAS 144-62-7)

US. New Jersey Worker and Community Right-to-Know Act

Ethanedioic acid (CAS 144-62-7)

US. Pennsylvania Worker and Community Right-to-Know Law

Ethanedioic acid (CAS 144-62-7)

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

Country(s) or region	Inventory name On inve	ntory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes
*A "Yes" indicates that all component	ents of this product comply with the inventory requirements administered by the governing cour	ntry(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

Material name: Brandt Drip-Rite 6000

country(s).

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

 Issue date
 07-02-2015

 Revision date
 11-13-2015

Version # 03

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 owns tests of

the Product to determine suitability of the Product for user's particular use.

Revision Information Product and Company Identification: Alternate Trade Names

Material name: Brandt Drip-Rite 6000