SAFETY DATA SHEET

1. Identification

RRAND

Product identifier Brandt Steric P DS

Other means of identification

Product code 27021

Recommended use Agricultural/ Horticultural Use- Micronutrient Fertilizer- Refer to product label.

Recommended restrictions Refer to product label. Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Brandt Consolidated, Inc. Company name **Address** 2935 South Koke Mill Road

Springfield, IL 62711

United States

Corporate Office 1-217-547-5800 **Telephone**

www.brandt.co Website 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** Not classified. **Environmental hazards** Not classified. **OSHA** defined hazards Not classified.

Label elements

None. Hazard symbol None. Signal word

Hazard statement The mixture does not meet the criteria for classification.

Precautionary statement

Observe good industrial hygiene practices. Prevention

Wash hands after handling. Response

Store away from incompatible materials. Storage

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

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Calcium Silicate		1344-95-2	< 0.2*
Other components below reports		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.

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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.

IngestionRinse mouth. Get medical attention if symptoms occur.Most importantDirect contact with eyes may cause temporary irritation.

symptoms/effects, acute and

delayed

media

Treat symptomatically.

Indication of immediate medical attention and special

treatment needed

General information 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 Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). 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

Use water spray to cool unopened containers.

Specific methodsUse 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. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Stop the flow of material, if this is without risk. Dike far ahead of spill for later disposal. Following product recovery, flush area with water. 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 prolonged exposure. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

Components	or Air Contaminants (29 CFR 1910.1000) Type	Value	Form
Calcium Silicate (CAS 1344-95-2)	PEL	5 mg/m3	Respirable fraction.
,		15 mg/m3	Total dust.
US. ACGIH Threshold Limit	Values		
Components	Туре	Value	
Calcium Silicate (CAS 1344-95-2)	TWA	10 mg/m3	
US. NIOSH: Pocket Guide to	Chemical Hazards		
Components	Туре	Value	Form
Calcium Silicate (CAS 1344-95-2)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
ogical limit values	No biological exposure limits noted for the ingr	redient(s)	

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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

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

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Wear suitable protective clothing. Other

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

Crystalline. **Appearance** Solid. **Physical state** Solid. **Form**

Color Red or Blue.

Relatively Odorless. Odor

Odor threshold Not available. Not available. pН Not available. Salt-Out / Crystallization Temp Not available. Melting point/freezing point Initial boiling point and boiling Not available.

range

Flash point Not available. Not available. **Evaporation rate** Flammability (solid, gas) Noncombustible

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

Not available.

(%)

Flammability limit - upper

(%)

Not available. Explosive limit - lower (%) Explosive limit - upper (%) Not available.

0.00001 hPa estimated Vapor pressure

Vapor density Not available. Relative density 1.8 g/cm3 (typical)

Solubility(ies)

> 95 % Solubility (water)

Partition coefficient Not available.

(n-octanol/water)

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

Other information

Pounds per gallon 15.02 (typical)

10. Stability and reactivity

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

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Material is stable under normal conditions. **Chemical stability**

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Contact with incompatible materials. Conditions to avoid

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

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

Skin contact No adverse effects due to skin contact are expected. Eye contact Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Not available. **Acute toxicity**

Product Species Test Results

Brandt Steric P DS (CAS Mixture)

Acute Dermal

LD50 Rat 68493.1484 mg/kg estimated

Inhalation

LC50 Rat 34246.5742 mg/m3 estimated

Other

LD50 Mouse 4285.7144 mg/kg estimated

> Rabbit 33673.4688 mg/kg estimated Rat 90102.0391 mg/kg estimated

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Serious eye damage/eye Direct contact with eyes may cause temporary irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not available.

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.

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

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

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

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not available.

Prolonged inhalation may be harmful. **Chronic effects**

12. Ecological information

The product is not classified as environmentally hazardous. However, this does not exclude the **Ecotoxicity** possibility that large or frequent spills can have a harmful or damaging effect on the environment.

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

Product Species Test Results

Brandt Steric P DS (CAS Mixture)

Aquatic

Crustacea EC50 Daphnia 1780.8219 mg/l, 48 hours estimated Fish LC50 Fish 37770.6484 mg/l, 96 hours estimated

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.

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 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

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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)

Not regulated.

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 - No

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)

Chemical nameCAS number% by wt.Monoammonium Phosphate (MAP)7722-76-190 - 100

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

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.

Inventory name

(SDWA)

US state regulations

US. Massachusetts RTK - Substance List

Calcium Silicate (CAS 1344-95-2)

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

Calcium Silicate (CAS 1344-95-2)

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

Calcium Silicate (CAS 1344-95-2)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

International Inventories

Country(s) or region

Country(s) or region	inventory name	On inventory (yes/no)
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No

^{*}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
 03-14-2016

 Revision date
 03-14-2016

Version # 02

United States & Puerto Rico

Disclaimer The information provided in this Safety Data Sheet is correct to the best of Manufacturer's

Toxic Substances Control Act (TSCA) Inventory

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

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On inventory (ves/ne)*