

SAFETY DATA SHEET

1. Identification

Product identifier	Brandt Converge SRN 18-3-6	
Other means of identification		
Product code	32057	
Recommended use	Agricultural/ Horticultural Use- NPK Fertilizer- 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	Serious eye damage/eye irritation	Category 2A
	Sensitization, respiratory	Category 1
	Reproductive toxicity	Category 2
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		



Signal word	Warning
Hazard statement	Causes serious eye irritation. Suspected of damaging fertility or the unborn child.
Precautionary statement	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
Response	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. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it 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)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Urea		57-13-6	20 - < 30*
Methylene-N,N'-bis(hydroxymethyl) urea polymer		9011-05-6	11.7
Tetrapotassium Pyrophosphate		7320-34-5	5 - < 10*
Ferric Ammonium EDTA		21265-50-9	0.72
Copper diammonium EDTA		67989-88-2	< 1*
EDTA manganese dipotassium		68015-77-0	< 1*
Ammonia		7664-41-7	< 0.1*
Other components below reportable levels			50 - < 60

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
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. If eye irritation persists: Get medical advice/attention.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. 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	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. 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. 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

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with eyes. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

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

Store in secured area away from children, feed, and other food products. Store in original container. Store in a well-ventilated area. Storage temperature: 40 F to 100 F.

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

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

Components	Type	Value
Ammonia (CAS 7664-41-7)	PEL	35 mg/m3 50 ppm
EDTA manganese dipotassium (CAS 68015-77-0)	Ceiling	5 mg/m3

US. ACGIH Threshold Limit Values (TLV)

Components	Type	Value	Form
Ammonia (CAS 7664-41-7)	STEL	35 ppm	
	TWA	25 ppm	
Copper diammonium EDTA (CAS 67989-88-2)	TWA	1 mg/m3	Dust and mist.
		0.2 mg/m3	Fume.

NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended

Components	Type	Value
Ammonia (CAS 7664-41-7)	IDLH	15 % 300 ppm
EDTA manganese dipotassium (CAS 68015-77-0)	IDLH	500 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards Recommended Exposure Limits (REL)

Components	Type	Value	Form
Ammonia (CAS 7664-41-7)	STEL	27 mg/m3 35 ppm	
	TWA	18 mg/m3 25 ppm	
Copper diammonium EDTA (CAS 67989-88-2)	TWA	1 mg/m3	Dust and mist.
		0.1 mg/m3	Fume.
EDTA manganese dipotassium (CAS 68015-77-0)	STEL	3 mg/m3	Fume.
	TWA	1 mg/m3	Fume.

US. OARS. Workplace Environmental Exposure Level (WEEL) Guide

Components	Type	Value	Form
Urea (CAS 57-13-6)	TWA	10 mg/m3	Total particulate.

Biological limit values

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

Appropriate engineering controls	Good general ventilation 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. Provide eyewash station.
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.
Other	Wear suitable protective 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	Observe any medical surveillance requirements. 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	Light green
Odor	Slight. Ammonia
Odor threshold	Not available.
pH	10
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	1.25 g/cm ³ (typical)
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Pounds per gallon	10.4 lb/gal (typical)

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 Prolonged inhalation may be harmful.
Skin contact Knowledge about health hazard is incomplete.
Eye contact Causes serious eye irritation.
Ingestion Expected to be a low ingestion hazard.

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

Information on toxicological effects

Acute toxicity Not known.

Product	Species	Test Results
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Brandt Converge SRN 18-3-6

Acute

Dermal

LD50 Rabbit 53722 mg/kg

Oral

LD50 Rabbit 9164 mg/kg

Components	Species	Test Results
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Ammonia (CAS 7664-41-7)

Acute

Inhalation

LC50 Mouse 3.36 mg/l, 1 Hours
3.31 mg/l, 2 Hours
Rat 4000 ppm, 1 Hours
5.1 mg/l, 1 Hours

Oral

LD50 Rat 350 mg/kg

Urea (CAS 57-13-6)

Acute

Oral

LD50 Rat 8471 mg/kg

Skin corrosion/irritation Due to partial or complete lack of data the classification is not possible.

Serious eye damage/eye irritation Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization Due to partial or complete lack of data the classification is not possible.

Skin sensitization Due to partial or complete lack of data the classification is not possible.

Germ cell mutagenicity Due to partial or complete lack of data the classification is not possible.

Carcinogenicity Risk of cancer cannot be excluded with prolonged exposure.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity Suspected of damaging fertility or the unborn child.

Specific target organ toxicity - single exposure	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of data the classification is not possible.
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.
Chronic effects	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.

Product	Species	Test Results	
Brandt Converge SRN 18-3-6			
Aquatic			
Crustacea	EC50	Daphnia	18301.0957 mg/l, 48 hours estimated
Fish	LC50	Fish	14064.9277 mg/l, 96 hours estimated
Components	Species	Test Results	
Ammonia (CAS 7664-41-7)			
Aquatic			
<i>Acute</i>			
Fish	LC50	Silver carp (<i>Hypophthalmichthys molitrix</i>)	0.38 mg/l, 96 hours
Urea (CAS 57-13-6)			
Aquatic			
<i>Acute</i>			
Crustacea	EC50	Water flea (<i>Daphnia magna</i>)	3910 mg/l, 48 hours
Fish	LC50	Carp (<i>Leuciscus idus melanotus</i>)	> 10000 mg/l, 48 hours
		Guppy (<i>Poecilia reticulata</i>)	>= 16200 - <= 18300 mg/l, 96 hours
		Harlequinfish, red rasbora (<i>Rasbora heteromorpha</i>)	12000 mg/l, 96 hours
		Mozambique tilapia (<i>Tilapia mossambica</i>)	590 - 730 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Ammonia	-2.66
Urea	-2.11

Mobility in soil No data available.

Other adverse effects The product contains volatile organic compounds which have a photochemical ozone creation potential.

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.

Toxic Substances Control Act (TSCA)**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Ammonia (CAS 7664-41-7)	Listed.
Copper diammonium EDTA (CAS 67989-88-2)	Listed.
EDTA manganese dipotassium (CAS 68015-77-0)	Listed.

SARA 304 Emergency release notification

Ammonia; Ammonia (anhydrous) (CAS 7664-41-7) 100 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)**SARA 302 Extremely hazardous substance**

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
Ammonia	7664-41-7	100	500		

SARA 311/312 Hazardous chemical Yes

Classified hazard categories Serious eye damage or eye irritation
Respiratory or skin sensitization
Reproductive toxicity

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Copper diammonium EDTA	67989-88-2	< 1
EDTA manganese dipotassium	68015-77-0	< 1

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

EDTA manganese dipotassium (CAS 68015-77-0)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Ammonia (CAS 7664-41-7)

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.

US state regulations**California Proposition 65**

WARNING: This product can expose you to chemicals including arsenic, cadmium, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes

Country(s) or region	Inventory name	On inventory (yes/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
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*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 03-17-2016

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Version # 09

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