

SAFETY DATA SHEET

1.1	Identification of the	substance/mixture and of the company/undertaking
		Brandt [®] Consan [®] Turf 19052
1.2	Relevant identified u Uses of the Substanc	uses of the substance or mixture and uses advised against e/Mixture: EPA Registration Number: 10324-94-48813 Turf fungicide. This product is intended to be diluted prior to use. For further information refer to the EPA Registered product label. Uses other than those identified are not recommended.
1.3	Company: E 2 L F	er of the safety data sheet Brandt Consolidated, Inc. 1935 South Koke Mill Road Springfield, IL 62711 Jnited States Phone: 217-547-5800 Email: msds@brandt.co
	Prepared by: E	H&S / Regulatory Department /19/2015
1.4	Emergency telephon Emergency telephone	
2.	Hazards identification	on
2.1	Skin corros	Clear solution with characteristic odor ents: Causes severe skin burns and serious eye damage Harmful if swallowed e damage/eye irritation Category 1 ion/irritation Category 1B
		ity (dermal) Category 4
	Acute toxic	
Signal V	Acute toxic GHS label elements, pictograms/symbols Vord: E Statements: H	ity (dermal) Category 4

Other hazards

No information available

3. Composition/information on ingredients

3.1 Information on components and impurities Chemical name CAS **GHS** Classification Concentration, % number(s) Alkyl (C12-18) dimethylbenzyl ammonium chloride 68391-01-5 Serious eve damage/eve irritation: Category 1. Skin >=20.0-<=21.0 corrosion/irritation: Category 1B, Acute toxicity (oral): Alkyl (C12-14) dimethylethylbenzyl ammonium chloride 85409-23-0 Category 3, Acute toxicity (dermal): Category 3; H301, H314, H318 Other components Not classified Balance

4. First aid measures

4.1 Description of first-aid measures

General advice: Show this material safety data sheet to medical personnel. Do not leave affected person unattended. Isolate exposed apparel for laundry before re-use.

Eye contact: Rinse eyes with water. Remove any contact lenses, and continue flushing eyes with running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eyes and lids with water. Seek medical attention if irritation develops or persists.

Skin contact: Take off contaminated clothing and shoes immediately. Wash affected areas with plenty of water. Seek medical attention if irritation develops or persists.

Ingestion: Do NOT induce vomiting. Do not give anything by mouth to an unconscious or convulsing person. Rinse mouth with water. Seek medical attention.

If inhaled: Remove from area to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

4.2 Most important symptoms and effects, both acute and delayed Risks: The most important known symptoms and effect

The most important known symptoms and effects are described in the labeling (section 2.2) and/or in section 11. Corrosive effects. Symptoms may include stinging, tearing, redness, swelling and blurred vision. Permanent eye damage including blindness could result. Prolonged or repeated skin contact may aggravate existing skin conditions. Inhalation of mists may aggravate existing chronic respiratory conditions such as asthma, emphysema or bronchitis.

4.3 Indication of any immediate medical attention and special treatment needed

Note to physician: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Treat symptomatically.

5. Firefighting measures

Flash Point and Method: None

5.1	Extinguishing media Suitable extinguishing media:	The product is not flammable Use media suitable for the material that is burning.
	Unsuitable extinguishing media:	No data available
5.2	Special hazards arising from the substance or	mixture
	Special hazards during fire fighting:	Container may rupture on heating.
	On combustion or on thermal decomposition:	May include carbon oxides, nitrogen oxides
5.3	Advice for firefighters	
	Special protective equipment for firefighters:	As in any fire, wear NIOSH/MSHA approved, pressure-demand self-contained breathing apparatus and full protective gear.
	Specific firefighting methods:	No special methods required. Move containers from area if it can be done without risk. Cool fire-exposed containers with water from side. Contain the extinguishing fluids by diking.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Spill area may be slippery. Wear appropriate protective equipment (See Section 8).

6.2 Environmental precautions

Avoid contact of spilled material and runoff with soil and surface waterways

6.3 Methods and material for containment and cleaning up Recovery: Stop leak if safe to do so. Absorb spills

Stop leak if safe to do so. Absorb spills with vermiculite, fuller's earth, or sand. Shovel up and place in a non-metal waste container for disposal. Dike large spills with soil or sandbags to contain it and prevent its spread. Keep in suitable, properly labeled, closed containers for disposal.

Decontamination/ cleaning: Wash non-recoverable remainder with large amounts of water. Clean contaminated surfaces thoroughly. Recover the cleaning water for subsequent disposal. Disposal: Dispose of in accordance with local regulations Additional advice: Spill area may be slippery

6.4 Reference to other sections

No information available

7.	Handling and storage	
7.1	Precautions for safe handling Technical measures: Advice on safe handling and usage:	Does not require any specific or particular measures Wear appropriate protective equipment including long chemical resistant gloves, chemical splash goggles and protective footwear. Handle in accordance with good industrial hygiene and safety practice. Do not spray toward face. Wash affected areas after use. Do not taste or swallow. Avoid breathing vapors or mists. Use only with adequate ventilation. Product residue may remain on/in empty containers. All precautions for handling the product must be used in handling the empty container and residue. FOR COMMERCIAL AND INDUSTRIAL USE ONLY.
7.2	Conditions for safe storage, includin	
	Technical measures for storage:	Does not require any specific or particular measures Storage class (TRGS 510): Non-combustible, corrosive materials
	Storage conditions	
	Recommended:	Keep container tightly closed. Opened containers must be carefully resealed and kept upright to prevent leakage.
	Incompatible products:	Hazardous reactions may occur on contact with certain chemicals. Refer to the list of incompatible materials section 10: "Incompatible materials"
7.3	Specific end use(s) No information available	

8. Exposure controls/personal protection

Introductory remarks:

These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should he handled in accordance with Section 13: Disposal considerations.

Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers

8.1 Control parameters

Components with workplace control parameters

Components	Value	Control parameters	Basis
Not reportable			

8.2	Exposure controls Control measures	
	Engineering measures:	Good general ventilation should be sufficient to control airborne levels. Respiratory protection is not required if good ventilation is maintained.
	Personal protective equi	pment
	Respiratory protection:	In operations where mists are generated, wear a NIOSH/MSHA approved respirator that has been selected by a technically gualified parson for the specific work conditions.

Hand protection:	a technically qualified person for the specific work conditions. Wear long chemical resistant gloves. Observe instructions regarding permeability and breakthrough time provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the
Eye protection: Skin and body protection:	product is used, such as the danger of cuts, abrasion and contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Wear chemical splash goggles. Wear footwear protecting against chemicals, and impervious clothing. Choose body protection according to the amount and concentration of the substances in the workplace.
Hygiene measures:	 Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet. 3) Wash exposed skin promptly to remove accidental splashes or contact with material.
Protective measures:	Ensure that eyewash stations and safety showers are close to the workstation location, and that emergency equipment is immediately accessible with instructions for use. The protective equipment must be selected in accordance with current local standards and in following proper use instructions from the supplier of the protective equipment. Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards, and/or risks that may occur during use.

9. Physical and chemical properties

Physical and chemical properties listed represent typical properties and should not be considered product specifications.

9.1 Information on basic physical and chemical properties

information on basic physical and ch	emical properties
Appearance:	Clear solution
Odor:	Characteristic odor
Odor Threshold:	No information available
pH:	6.5-8.5
Freezing point:	No information available
Melting point/range:	No information available
Boiling point/boiling range:	>100°C
Flash point:	Does not flash
Evaporation rate:	No information available
Flammability (solid, gas):	Not applicable
Flammability/Explosive limit:	No information available
Auto-ignition temperature:	No information available
Vapor pressure:	No information available
Vapor density:	No information available
Density:	0.99 g/ml, 8.2 lbs/gal (25°C)
Solubility:	Water solubility: soluble
Solubility in other solvents:	No information available
Partition coefficient: n-octanol/water:	No information available
Thermal decomposition:	No information available
Viscosity:	Low viscosity
Explosive properties:	No information available
Oxidizing properties:	No information available

9.2 Other information

No information available

10. Stability and reactivity

10.1 Reactivity

- No information available
- 10.2 Chemical stability

Stable and non-reactive under normal conditions of use, storage and transport

- 10.3 Possibility of hazardous reactions
- No information available
- 10.4 Conditions to avoid
- No information available
- 10.5 Incompatible materials
- Anionic surfactants 10.6 Hazardous decomposition products
 - Oxides of carbon and nitrogen

11. Toxicological information

Product Summary:

Causes severe skin burns and serious eye damage. Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly digestive tract. Vapors and spray mist may irritate throat and respiratory system and cause coughing.

No data available for the teratogenicity, mutagenicity, or reproductive toxicity of this product. No data available to designate the product as causing specific target organ toxicity through repeated exposure. No data available to designate product as an aspiration hazard.

Information on likely routes of exposure:

Eye contact	Corrosive. Causes serious eye damage. Symptoms may include pain, burning sensation, redness, watering, blurred vision or loss of vision.
Skin contact Ingestion	Corrosive. Causes severe burns. Symptoms may include burns, blisters, redness and pain (which may be delayed). Harmful is swallowed. Causes burns/serious damage to mouth, throat and stomach. Symptoms may include vomiting, nausea, and/or feeling of general unwellness.
Inhalation	May cause irritation and corrosive effects to nose, throat and respiratory tract. Symptoms may include coughing and difficulty breathing.
Sensitization	No known effects
	rmation on toxicological effects te toxicity

Acute oral:	LD₅₀ 507 mg/kg
Acute dermal:	LD ₅₀ >2,000 mg/kg
Acute inhalation:	No information available
Acute toxicity (other):	No information available
Skin corrosion/irritation	
Skin irritation:	Corrosive. Causes severe burns
Serious eye damage/eye irritation	
Eye irritation:	Corrosive. Causes serious eye damage
-	

	Respiratory or skin sensitization Sensitization:		Not classified as sensitizing by skin contact No information available No information available This product does not contain any ingredient designated as probable or suspected human carcinogens by IARC, ACGIH No information available No information available No information available		
	Mutagenicity Genotoxicity in vitro: Genotoxicity in vivo: Carcinogenicity Carcinogenicity:	No inform This prod			
	Toxicity for reproduction and de Toxicity to reproduction/ Developmental toxicity/t Specific Target Organ Toxicity (fertility: No inform eratogenicity: No inform			
	STOT-single exposure: STOT-repeated exposure Aspiration toxicity	re: No inform			
Other H	Aspiration toxicity: lazards mation available	No inform	nation available		
12.	Ecological information				
12.1	Toxicity				
12.2	Aquatic toxicity: Persistence and degradability	Toxic to a	aquatic life		
12.3	Biodegradation: Bioaccumulative potential	No inform	nation available		
12.4	Partition coefficient: n-or Bioconcentration factor Mobility in soil		cumulation is to be exponent nation available	ected (log Pow<=4)	
12.5	Known distribution to environmental compartn Results of PBT and vPvB asses		No information available		
12.6	No information available Other adverse effects)			
12.0	Environmental assessm		No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product.		
13.	Disposal considerations				
13.1	Waste treatment methods PESTICIDE DISPOSAL	mixture o use accol agency, c	r rinsate is a violation o rding to label instructior or the Hazardous Waste	ardous. Improper disposal of excess pesticide, spray f Federal law. If these wastes cannot be disposed of by is, contact your State Pesticide or Environmental control e Representative at the nearest EPA Regional Office for	
	Product disposal: Packaging:	Observe	guidance. Observe all applicable federal, state, and local regulations Remove all residue when emptying		
14.	Transportation information				
	DOT Hazard Classification:	(QUATER Transport		IFECTANTS, LIQUID, CORROSIVE, N.O.S. OMPOUND)	
15.	Regulatory information				
15.1	Safety, health and environmenta	al regulations/legislation	specific for the subst	ance or mixture	
	Notification status: OSHA Hazard Communication S	standard (26 CFR 1910.12	Not applicat 200): Hazardous	le	
Ingradi	CERCLA (RQ)	Weight		Section 302 TPO	
Ingredie Not liste	ent(s) CAS#	Weight	CERCLA RQ	Section 302 TPQ	
	ent(s) CAS# ed SARA/EPCRA Extremely Hazard	-		Section 302 TPQ TPQ	

SARA Hazard Categories (311/312)

Fire	Reactive	Acute health	Chronic health		
		hazard	hazard		
No	No	Yes	No		
SARA Toxic Substances (313) The following components are subject to SARA Section 313 reporting requirements					
In an all a mat/a)	040#	Mainht.	1		

ingreatent(s)	CAS#	weight		
Not listed				
CAA (311) Volatile Organic compounds				
Ingradiant(a)	0.1.0.1			
Ingredient(s)	CAS#	Weight		

15.2 FIFRA Information

EPA Pesticide Registration Number 10324-94-48813

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

DANGER. Keep Out of Reach of Children. Corrosive. Causes irreversible eye damage and skin burns. Harmful if swallowed or absorbed through the skin. Do not get in eyes, on skin or clothing. Wear goggles or face shield and rubber gloves and protective clothing when handling. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse

16. Other information

NFPA-Classification		HMIS-Classification	HMIS-Classification	
Health	3 high	Health	3 high	
Flammability	0 insignificant	Flammability	0 insignificant	
Instability or Reactivity	0 insignificant	Reactivity	0 insignificant	
		HMIS PPE	В	
		B=Safety glasses, Glove	S	

Key or legend to abbreviations and acronyms used in the safety data sheet					
ACGIH:	American Conference of Governmental Industrial Hygienists	NIOSH:	National Institute for Occupational Safety and Health		
HMIS:	Hazardous Materials Identification System	NTP:	National Toxicology Program		
IARC:	International Agency for Research on Cancer	OSHA:	Occupational Safety and Health Administration		
NFPA:	National Fire Protection Association				

Disclaimer:

This document was created for reference purposes only. Based on the US EPA approved basic formulation.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of this publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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