SAFETY DATA SHEET

Section I - Product & Company Identification

Product identifier

Product name: BRAVO LAUNDRY DETERGENT

Product form: Liquid

Other means of identification: 1132

Relevant identified uses of the substance or mixture: Liquid detergent

Details of the supplier of the safety data sheet

Manufacturer:

Diversified Chemical Products, Inc. 4124 B NW Riverside Street, Riverside, MO 64150

Phone: 816-472-5515

Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300

Section II - Hazards Identification

Classification

Corrosive to metals Category 1 Serious Eye Damage/Eye Irritation Category 1 Skin corrosion/irritation Category 1B Reproductive toxicity Category 2

Pictogram



Signal Word Danger

Hazard Statements

Causes severe skin burns and eye damage. Suspected of damaging fertility or the unborn child. May be corrosive to metals.

Precautionary Statements – Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Do not breathe dust/fume/gas/mist/vapor/spray.

Keep only in original container.

<u>Precautionary Statements – Response</u>

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash

before reuse. If skin irritation occurs get medical advice.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician .Rinse mouth IF EXPOSED OR CONCERNED, get medical advice/attention.

Precautionary Statements - Storage

Store in a corrosion resistant container. Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Section III – Composition/Information on ingredients

Mixture

Name	CAS#	Weight %
Sodium Tetraborate Decahydrate	1303-96-4	1-5
Sodium carbonate	497-19-8	70-80
Sodium tripolyphosphate	7758-29-4	5-10
Sodium metasilicate	68603-42-9	10-20

Any concentration shown as a range is to protect confidentiality or is due to process variation.

Section IV – First Aid Measures

First Aid Measures

Inhalation: Remove to fresh air. If symptoms persist, call a physician.

Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately. **Ingestion:** Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell. **Skin Contact:** Wash with plenty of water. If skin irritation persists, call a physician.

Most Important Symptoms and Effects, both Acute and Delayed

Symptoms

May cause eye damage with reddening and watering. May cause skin burns.

Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians: Treat symptomatically.

Section V – Fire Fighting Measures

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

No data available.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, NIOSH (approved or equivalent) and full protective gear.

Section VI -Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Use personal protective equipment as required.

Methods and Material for Containment and Cleaning Up

Methods for Containment: Prevent further leakage or spillage if safe to do so. Prevent discharge to the environment, municipal sewers.

Methods for Cleaning Up: Soak up with inert absorbent material and place in containers. Keep in suitable, closed containers for disposal.

Section VII - Handling & Storage

Precautions for Safe Handling

Advice on Safe Handling: Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use personal protection recommended in Section 8.

Conditions for Safe Storage, Including any Incompatibilities

Storage conditions: Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials: Strong acids.

Section VIII – Exposure Controls/ Personal Protection

Exposure Guidelines

Chemical Name	CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium Tetraborate Decahydrate	1303-96-4	TWA: 25 ppm	Not determined	Not determined
Sodium carbonate	497-19-8	No exposure limit	No exposure limit	No exposure limit
Sodium tripolyphosphate	7758-29-4	No exposure limit	No exposure limit	No exposure limit
Sodium metasilicate	68603-42-9	No exposure limit	No exposure limit	No exposure limit

Appropriate Engineering Controls

Engineering Controls: Provide adequate ventilation. Eyewash stations.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection: Wear approved safety goggles where a splash hazard exists.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations: Handle in accordance with good industrial hygiene and safety

practice.

Section IX – Physical & Chemical Properties

Information on Basic Physical and Chemical Properties

Physical StatePowderColorWhite

 Property
 Values

 pH
 11.25-12.5

Melting Point/Freezing Point No data available Boiling Point/Boiling Range No data available Flash Point Not Flammable **Evaporation Rate** No data available Flammability (Solid,Gas) No data available **Upper Flammable Limits** No data available Lower Flammable Limits No data available Vapor Pressure No data available Vapor Density No data available Specific Gravity No data available Water Solubility Soluble in Water Solubility in Other Solvents No data available Partition Coefficient No data available Autoignition Temperature No data available Decomposition Temperature No data available Kinematic Viscosity No data available Dynamic Viscosity No data available **Explosive Properties** Not an Explosive Oxidizing Properties Not an oxidizer

Odor Odorless

Odor Threshold Not Determined

Section X – Stability & Reactivity

Reactivity

Reactive with acids.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

Strong acids.

Hazardous Decomposition Products

None known based on information supplied

Section XI - Toxicological information

Information on Likely Routes of Exposure

Product Information

Inhalation: Avoid breathing vapors or mists. **Eye Contact:** Causes serious eye damage.

Skin Contact: Causes skin burns.

Ingestion: May be harmful if swallowed.

This product as a whole has not been tested for acute toxicity; the following is based on component data:

Chemical Name	CAS#	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Tetraborate	1303-96-4	2400-2600 mg/kg(Rat)	>2000 mg/kg (Rabbit)	No data available
Decahydrate				
Sodium carbonate	497-19-8	4090 mg/kg (Rat)	No data available	5750 mg/l (Rat) 2 h
Sodium	7758-29-	>2000 mg/kg (Rat)	4640 mg/kg (Rabbit)	>0.39 mg/l 4 h (Rat)
tripolyphosphate	4			
Sodium metasilicate	68603-	1152-1349 mg/kg	>5000 mg/kg (Rat)	>2.06 g/m ³ (Rat)
	42-9	(Rat)		

Chemical Name	Sodium Tetraborate Decahydrate	Sodium carbonate
Skin corrosion/irritation	No skin irritation	Mild irritation
Serious eye	Moderate irritation	eye irritation
damage/irritation		
Respiratory or skin	Not classified	No data available.
sensitization		
Mutagenicity	No data available	No data available.
Carcinogenicity	Not classified.	Not a carcinogen
Reproductive toxicity	Suspected of damaging fertility or the	No data available.
	unborn child	
Specific target organ	No data available	No data available
toxicity-Single exposure		
Specific target organ	No data available	No data available
toxicity-repeated		
exposure		
Aspiration hazard	No data available	No data available

Chemical Name	Sodium tripolyphosphate	Sodium metasilicate
Skin corrosion/irritation	No irritation	Skin burns
Serious eye	No irritation	Serious eye damage
damage/irritation		
Respiratory or skin	Not a sensitizer	Not a sensitizer
sensitization		
Mutagenicity	negative	negative
Carcinogenicity	Not a carcinogen	Not a carcinogen
Reproductive toxicity	No data available	No evidence of toxicity.
Specific target organ	No data available	Irritating to respiratory system.
toxicity-Single exposure		
Specific target organ	No data available	Not classified
toxicity-repeated		
exposure		
Aspiration hazard	No data available	Not classified

<u>Information on Physical, Chemical and Toxicological Effects</u>

Symptoms: Please see section 4 of this SDS for symptoms.

<u>Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure</u>

Carcinogenicity: This product does not contain carcinogens or potential carcinogens as listed

by OSHA, IARC or NTP.

Numerical Measures of Toxicity: Not determined

Section XII - Ecological information

Ecotoxicity

There is no data available for this product as a whole.

Chemical Name	CAS#	Algae/aquatic plants	Fish	Crustacea
Sodium	1303-96-4	No data available	LC50- Limanda	No data available
Tetraborate			limanda – 74 mg/l –	
Decahydrate			96 h	
Sodium carbonate	497-19-8	No data available	LC50 - Lepomis	EC50 - Daphnia magna
			macrochirus	(Water flea) - 265 mg/l
			(Bluegill) - 300	- 48 h
			mg/l - 96 h	
Sodium	7758-29-4	No data available	No data available	EC50 - Daphnia magna
tripolyphosphate				(Water flea) ->100 mg/l
				- 48 h
Sodium	68603-42-9	No data available	LC50 - Danio rerio	EC50 - Daphnia magna
metasilicate			(zebra fish) - 210	(Water flea) - 1700 mg/l
			mg/l - 96 h	- 48 h

Persistence and Degradability

No data available

Bioaccumulation

No data available

Mobility

No data available

Section XIII - Disposal considerations

Waste Disposal Method

Dispose of material in accordance with all Federal, State and local regulations. Local regulations may be more stringent than Federal or State. Avoid discharge to sewers or waterways.

Section XIV - Transport information

DOT Proper Shipping Description:

Bulk & Non-bulk: UN3262, corrosive solid, basic, inorganic, N.O.S., (Sodium

metasilicate), 8, PG III

Section XV - Regulatory information

SARA Title III Section 311/312 (40CFR370): Acute and chronic health hazard

SARA Title III Section 313 (40CFR372): None

RCRA Status (40CFR261.33): No reportable components.

TSCA Inventory Status: Reported/included OSHA/NTP/IARC Carcinogen Status: Not listed

Canadian DSL Status: Reported/included

Chemicals Known to the State of California to Cause Cancer or Reproductive Toxicity:

This material is not known to contain chemicals currently listed as carcinogens or

reproductive toxins.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sodium Tetraborate	X	X	X
Decahydrate			
Sodium carbonate	X	Not listed	X
Sodium tripolyphosphate	X	X	X
Sodium metasilicate	Not listed	Not listed	Not listed

Section XVI - Other information

HMIS ratings: Health: 3* Flammability: 0 Reactivity: 1

Indication of changes: Revision -1

The information herein is presented in good faith and believed to be correct as of the date hereof. However, the manufacturer makes no representation as to the completeness and accuracy thereof. Users must make their own determination as to the suitability of the product for their purposes prior to use.

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END OF SDS