

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : BREAKTHROUGH+
Product code : 667

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Laundry detergent
Restrictions on use : For professional use only

1.4. Supplier's details

Christeyns North America, LLC
311 Staton Road
Greenville, NC 27834
USA
T 252-756-8616 / 800.869.6171
info@christeyns.us - www.christeyns.com

1.5. Emergency phone number

Emergency number : VELOCITY EHS (800) 255-3924 (24 HOURS)
(For use only in the event of emergencies involving a spill, leak, fire, exposure, or accident involving chemicals)

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Serious eye damage/eye irritation, Category 1 H318 Causes serious eye damage.
Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger
Hazard statements (GHS US) : H318 - Causes serious eye damage
Precautionary statements (GHS US) : P280 - Wear eye protection.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a poison center or doctor.

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SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Sodium carbonate	CAS-No.: 497-19-8	30 - 60
Sodium percarbonate	CAS-No.: 15630-89-4	5 - 10
Sodium silicate	CAS-No.: 1344-09-8	3 - 7
Sodium alkylbenzene sulfonate	CAS-No.: 68411-30-3	1 - 5
Sodium sulfate	CAS-No.: 7757-82-6	0.1 - 1

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Treat symptomatically. Get medical attention if symptoms occur.
First-aid measures after skin contact	: Rinse skin with plenty of water or shower. If irritation persists, get medical attention.
First-aid measures after eye contact	: Rinse immediately with water for 15 minutes, occasionally lifting upper and lower eyelids. Remove contact lenses, if present, and easy to do. Continue rinsing. Get medical attention immediately.
First-aid measures after ingestion	: Rinse mouth with water if the person is conscious. Do not induce vomiting unless directed by medical personnel. Get medical attention if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

No additional information available

4.3. Indication of immediate medical attention and special treatment needed, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Do not use a water jet as this can spread the fire and may cause the splattering of corrosive liquid.
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5.2. Specific hazards arising from the chemical

Fire hazard	: Decomposition products may include carbon oxides.
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5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. In case of fire, do not breathe fumes. Move containers from the fire area if you can do so without risk. Prevent firefighting water from entering the environment.
Protection during firefighting	: Wear a self-contained breathing apparatus. Do not attempt to take action without suitable protective equipment.

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SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment : For spills or leaks, contact a supervisor and/or emergency responder. Avoid contact with spilled material and keep unnecessary personnel away.

For emergency responders

Protective equipment : See Section 8 for recommended personal protective equipment. Ventilate the area and restrict access to the spill or leak zone. Have emergency procedures in place for treating exposures or incidents. Only trained and authorized personnel equipped with proper protective equipment should perform cleanup.

Environmental precautions : Avoid release onto the ground, into storm sewers, or bodies of water.

6.2. Methods and materials for containment and cleaning up

Methods for cleaning up : Stop leak if safe to do so. Contain spillage, soak up with non-combustible absorbent material (e.g. sand, earth, diatomaceous earth, vermiculite) and collect all waste in suitable, labeled, and closed containers. Dispose according to local legislation (See Section 13).

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Handle in accordance with good industrial hygiene and safety practices. Use only with adequate ventilation. Avoid contact with skin, eyes, and clothing. Use appropriate personal protection equipment (PPE). Wash thoroughly after handling.

7.2. Conditions for safe storage, including incompatibilities

Storage conditions : Store upright in a tightly closed, suitably labeled container. Store in a dry, cool, well-ventilated area with appropriate designated containment measures. Keep out of reach of children. Have readily available spill kits with appropriate absorbent materials. Protect from sunlight. Store in original labeled containers.

Incompatible products : Keep away from strong acids, strong bases, flammables/combustibles, oxidizers, and reactive metals (aluminum, zinc, magnesium, iron filings).

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Sodium carbonate (497-19-8)

USA - OSHA - Occupational Exposure Limits

OSHA PEL TWA	10 mg/m ³ Total dust; 5 mg/m ³ Respirable fraction
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8.2. Appropriate engineering controls

Appropriate engineering controls : Maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable guidelines, use only with adequate ventilation. Eye wash facilities and emergency showers must be available when handling this product.

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8.3. Individual protection measures, such as personal protective equipment

Materials for protective clothing:
Wear suitable protective clothing. Long sleeved protective clothing.
Hand protection:
Chemical resistant PVC gloves
Eye protection:
Safety glasses with side shields.

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Solid
Color	: White with blue specks
Odor	: No data available
Odor threshold	: No data available
pH	: 10.9
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Density	: 1.09 kg/l
Solubility	: No data available
Log Pow	: No data available
Autoignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Explosion limits	: No data available
Particle characteristics	: No data available

Sodium carbonate	
Particle characteristics	No data available

Sodium percarbonate	
Particle characteristics	No data available

Sodium silicate	
Particle characteristics	No data available

Sodium alkylbenzene sulfonate	
Particle characteristics	No data available

Sodium sulfate	
Particle characteristics	No data available

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9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

Not reactive under normal conditions of use, storage, and transport.

10.2. Chemical stability

Stable under recommended storage conditions. Decomposes slowly when exposed to heat, sunlight, or contamination with incompatible materials.

10.3. Possibility of hazardous reactions

May cause exothermic decomposition and release of oxygen if contaminated or heated. Contact with incompatible materials may cause reactions.

10.4. Conditions to avoid

Avoid heat, sparks, open flames, direct sunlight, and contamination with organic materials or metals (iron, copper, nickel, manganese). Avoid mixing with other cleaning products.

10.5. Incompatible materials

Incompatible with reducing agents, organic materials, acids, bases, transition metals, metal salts, or combustible materials. Avoid contact with chlorinated products, ammonia, or strong alkalis.

10.6. Hazardous decomposition products

Decomposition may produce oxygen or other toxic and irritating gases.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Sodium carbonate (497-19-8)

LD50 oral rat	2800 mg/kg Source: OECD Screening Information Data Set
LD50 dermal rabbit	> 2000 mg/kg Source: OECD Screening Information Data Set
LC50 Inhalation - Rat (Dust/Mist)	1.2 mg/l Source: SIDS

Sodium percarbonate (15630-89-4)

LD50 oral rat	1034 mg/kg Source: OECD SIDS, IUCLID
LD50 dermal rabbit	> 2000 mg/kg body weight Animal: rabbit, Guideline: other:

Sodium silicate (1344-09-8)

LD50 oral rat	3400 mg/kg Source: SIDS
LD50 dermal rat	> 5000 mg/kg body weight Animal: rat, Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 2.06 mg/l air Animal: rat, Guideline: EPA OPPTS 870.1300 (Acute inhalation toxicity)
ATE US (oral)	3400 mg/kg body weight

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Sodium alkylbenzene sulfonate (68411-30-3)	
LD50 oral rat	1080 – 1980 mg/kg
LD50 dermal rat	> 2000 mg/kg
Sodium sulfate (7757-82-6)	
LD50 oral rat	> 10000 mg/kg Source: OECD Screening Information Data Set
LC50 Inhalation - Rat	> 2.4 mg/l air Animal: rat, Guideline: OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class Method)
Skin corrosion/irritation	: Not classified. pH: 10.9
Serious eye damage/irritation	: Causes serious eye damage. pH: 10.9
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Sodium silicate (1344-09-8)	
NOAEL (animal/female, F0/P)	> 159 mg/kg body weight Animal: rat, Animal sex: female
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
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Viscosity, kinematic	No data available
Sodium carbonate (497-19-8)	
Viscosity, kinematic	No data available
Sodium percarbonate (15630-89-4)	
Viscosity, kinematic	No data available
Sodium silicate (1344-09-8)	
Viscosity, kinematic	No data available
Sodium alkylbenzene sulfonate (68411-30-3)	
Viscosity, kinematic	No data available
Sodium sulfate (7757-82-6)	
Viscosity, kinematic	No data available

SECTION 12 Ecological information

12.1. Ecotoxicity

Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

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Sodium carbonate (497-19-8)	
LC50 - Fish [1]	300 mg/l Source: International Uniform Chemical Information Database
EC50 - Crustacea [1]	200 – 227 mg/l Source: OECD Screening Information Data Set
EC50 - Crustacea [2]	200 – 227 mg/l Test organisms (species): Ceriodaphnia sp.
EC50 96h - Algae [1]	242 mg/l Source: ECOTOX
Sodium percarbonate (15630-89-4)	
LC50 - Fish [1]	70.7 mg/l Source: EPA guideline, SIDS
EC50 - Crustacea [1]	4.9 mg/l Source: SIDS
ErC50 algae	> 7.7 mg/l Source: SIDS
Sodium silicate (1344-09-8)	
LC50 - Fish [1]	1108 mg/l Source: SIDS
EC50 - Crustacea [1]	1700 mg/l Source: SIDS
EC50 72h - Algae [1]	345 mg/l Source: SIDS
EC50 72h - Algae [2]	> 345.4 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
Sodium alkylbenzene sulfonate (68411-30-3)	
LC50 - Fish [1]	4.1 mg/l Source: SIDS
EC50 - Crustacea [1]	6.8 mg/l Source: International Uniform Chemical Information Database
EC50 72h - Algae [1]	20 mg/l Source: International Uniform Chemical Information Database
Sodium sulfate (7757-82-6)	
LC50 - Fish [1]	7960 mg/l Source: OECD Screening Information Data Set
EC50 - Crustacea [1]	≈ 3150.21 mg/l Test organisms (species): Ceriodaphnia dubia
LC50 - Fish [2]	≈ 7960 mg/l Test organisms (species): Pimephales promelas

12.2. Persistence and degradability

BREAKTHROUGH+	
Persistence and degradability	Not rapidly degradable
Sodium carbonate (497-19-8)	
Persistence and degradability	Not rapidly degradable
Sodium percarbonate (15630-89-4)	
Persistence and degradability	Not rapidly degradable
Sodium silicate (1344-09-8)	
Persistence and degradability	Not rapidly degradable
Sodium alkylbenzene sulfonate (68411-30-3)	
Persistence and degradability	Not rapidly degradable
Sodium sulfate (7757-82-6)	
Persistence and degradability	Not rapidly degradable

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12.3. Bioaccumulative potential

Sodium carbonate (497-19-8)

Log Pow	-6.19 Source: Quantitative Structure Activity Relation
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Sodium alkylbenzene sulfonate (68411-30-3)

Log Pow	3.32 Source: ICSC
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Sodium sulfate (7757-82-6)

Log Pow	-3 Source: OECD Screening Information Data Set
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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13 Disposal considerations

Regional legislation (waste)	: Avoid unauthorized disposal. Do not dump into any body of water. Comply with federal, state/provincial and local laws/regulations. Do not reuse empty containers.
Waste treatment methods	: Do not allow the product to contaminate any body of water. Refer to Section 8 for personal protection equipment.

SECTION 14 Transport information

In accordance with DOT

DOT

14.1. UN number

Not regulated for transport

14.2. Proper Shipping Name

Not regulated

14.3. Transport hazard class(es)

Not regulated

14.4. Packing group

Not regulated

14.5. Environmental hazards

Not regulated

No supplementary information available

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

Not regulated

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SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Sodium alkylbenzene sulfonate	CAS-No. 68411-30-3	1 - 5%
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This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

No additional information available

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Sodium percarbonate(15630-89-4)	U.S. - New York City - Right to Know Hazardous Substances List
Sodium sulfate(7757-82-6)	U.S. - Massachusetts - Right To Know List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16 Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date : 1/15/2026

Full text of hazard classes and H-statements

H318	Causes serious eye damage
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Safety Data Sheet (SDS), USA ML

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.