Safety Data Sheet

UNX-Christeyns
707 E. Arlington Blvd.
Greenville, NC 27858
Telephone: 252.756.8616
website: unxchristeyns.com

Section 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	**Breakthrough+**
Product Use	Detergent
Product Code	0667
Date of Issue	01/19/2024
Supersedes	

Emergency Telephone Numbers:
Velocity EHS : 1-800-255-3924 (24 Hours)
(For use only in the event of emergencies involving a spill, leak, fire, exposure, or accident involving chemicals)

Section 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Serious eye damage/eye irritation, Category 1 H318
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects Causes serious eye damage.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]
Hazard pictograms (CLP) :

GHS05

CLP Signal word : Danger
Contains : Sodium disilicate, Sodium percarbonate, Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and benzenesulfonic acid, 4-methyl-, reaction products with sodium hydroxide
Hazard statements (CLP) : H318 - Causes serious eye damage.
Precautionary statements (CLP) : P280 - Wear eye protection.
P305+P351+P338+P310 - 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.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substances
Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sodium carbonate substance with national workplace exposure limit(s) (RO)	CAS-no: 497-19-8 Einecs nr: 207-838-8 EG annex nr: 011-005-00-2 REACH-no: 01-2119485498-19	30 – 60	Eye Irrit. 2, H319
Sodium chloride substance with national workplace exposure limit(s) (LT, LV)	CAS-no: 7647-14-5 Einecs nr: 231-598-3 REACH-no: /	10 – 30	Not classified
Sodium sulphate substance with national workplace exposure limit(s) (LT, LV)	CAS-no: 7757-82-6 Einecs nr: 231-820-9 REACH-no: 01-2119519226-43	10 – 30	Not classified
Sodium percarbonate	CAS-no: 15630-89-4 Einecs nr: 239-707-6 REACH-no: 01-2119457268-30	5 – 10	Ox. Sol. 3, H272 Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
Sodium disilicate	CAS-no: 1344-09-8 Einecs nr: 215-687-4 EG annex nr: 215-687-4 REACH-no: 01-2119448725-31	3 – 5	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and benzenesulfonic acid, 4-methyl-, reaction products with sodium hydroxide	CAS-no: 68411-30-3 Einecs nr: 932-051-8 REACH-no: 01-2119565112-48	1 – 3	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits**
Sodium percarbonate	CAS-no: 15630-89-4 Einecs nr: 239-707-6 REACH-no: 01-2119457268-30	(10 ≤C < 25) Eye Irrit. 2, H319 (25 ≤C < 100) Eye Dam. 1, H318 (25 ≤C < 100) Acute Tox. 4 (Oral), H302

Full text of H- and EUH-statements: see section 16

Section 4 - FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation : Remove person to fresh air and keep comfortable for breathing.

Skin contact : Wash skin with plenty of water.

Eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

Ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed
Acute effects eyes : Serious damage to eyes.

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

Section 5 - FIRE FIGHTING MEASURES

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Section 6 - ACCIDENTAL RELEASE MEASURES

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

Section 7 - HANDLING AND STORAGE

Precautions for safe handling Precautions for safe handling

Hygiene measures : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:

Safety glasses with side shields (EN 166)

8.2.2.2. Skin protection

Protective equipment:

Wear suitable protective clothing minimum (EN 13034) Type 6 equipment

Hand protection:

Chemical resistant PVC gloves (to European standard EN 374 or equivalent)

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: White + blue points.
Physical state/form	: Powder.
Odour	: Not available
Odour threshold	: Not available
Melting point/range	: Not available
Freezing point	: Not applicable
Boiling point/Boiling range	: Not available
Flammability	: Non flammable.
Explosive limits	: Not applicable
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Autoignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: 10.9 (1%)
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1.09 kg/l
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available
Particle size distribution	: Not available

Particle shape	: Not available
Particle aspect ratio	: Not available
Particle aggregation state	: Not available
Particle agglomeration state	: Not available
Particle specific surface area	: Not available
Particle dustiness	: Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

Section 10 - STABILITY AND REACTIVITY

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11 - TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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

Sodium percarbonate (15630-89-4)	
LD50 dermal	> 2000 mg/kg bodyweight

Sodium sulphate (7757-82-6)	
LD50 oral rat	10000 mg/kg
LD50 oral	> 2000 mg/kg bodyweight
LC50 Inhalation - Rat	> 2.4 mg/l/4h

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and benzenesulfonic acid, 4-methyl-, reaction products with sodium hydroxide (68411-30-3)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg

Skin corrosion/irritation	: Not classified pH: 10.9 (1%)
Serious eye damage/irritation	: Causes serious eye damage. pH: 10.9 (1%)
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified

Sodium disilicate (1344-09-8)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure	: Not classified

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and benzenesulfonic acid, 4-methyl-, reaction products with sodium hydroxide (68411-30-3)	
LOAEL (oral, rat, 90 days)	145 mg/kg bodyweight/day

Aspiration hazard : Not classified

Superwash	
Viscosity, kinematic	Not applicable

11.2. Information on other hazards
No additional information available

Section 12 - ECOLOGICAL INFORMATION

12.1. Toxicity
Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

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

Sodium percarbonate (15630-89-4)	
LC50 - Fish [1]	> 70 mg/l
EC50 - Other aquatic organisms [1]	4.9 mg/l waterflea
NOEC (acute)	2 mg/l

Sodium sulphate (7757-82-6)	
LC50 - Fish [1]	7960 mg/l
EC50 - Crustacea [1]	4580 mg/l
EC50 - Other aquatic organisms [1]	4580 mg/l waterflea
EC50 - Other aquatic organisms [2]	1900 mg/l

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and benzenesulfonic acid, 4-methyl-, reaction products with sodium hydroxide (68411-30-3)	
LC50 - Fish [1]	> 1 (≤ 10) mg/l

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential

Sodium sulphate (7757-82-6)	
Log Pow	-3

Sodium chloride (7647-14-5)	
Log Pow	-3

12.4. Mobility in soil
No additional information available

12.5. Results of PBT and vPvB assessment
No additional information available

12.6. Endocrine disrupting properties
No additional information available

12.7. Other adverse effects
No additional information available

Section 13 - DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

HP Code : HP2 - “Oxidising:” waste which may, generally by providing oxygen, cause or contribute to the combustion of other materials.
HP3 - “Flammable:”
– flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C;
– flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;
– flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;
– flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;
– water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;
– other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.
HP4 - “Irritant – skin irritation and eye damage:” waste which on application can cause skin irritation or damage to the eye.

Section 14 - TRANSPORT INFORMATION

In accordance with ADR / IMDG / IATA

ADR	IMDG	IATA
14.1. UN number or ID number		
Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name		
Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)		
Not applicable	Not applicable	Not applicable
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
Not applicable	Not applicable	Not applicable
No supplementary information available		

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

Section 15 - REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)
Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)
Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Detergent Regulation (648/2004)

Labelling of contents	
Component	**%**
Oxygen-based bleaching agents	5-15%
non-ionic surfactants, anionic surfactants	<5%
enzymes	
optical brighteners	
TOCOPHEROL	
BHT	
perfumes	

Explosives Precursors Regulation (2019/1148)
Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)
Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations
No additional information available

15.2. Chemical safety assessment
No chemical safety assessment has been carried out

Section 16 - OTHER INFORMATION

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
	Date first issue	Added	
	Supersedes	Modified	
	Review date	Modified	
3.2	Composition/information on ingredients	Modified	

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association

Abbreviations and acronyms:	
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Other information : It is recommended to pass the information of this safety data sheet in an appropriate form to the users. Such information is actually the best of our knowledge and believes accurate as reliable. This information relates to the specific material designated and may not be valid in combination with other products.
This safety data sheet is in compliance with 1907/2006/EEC. It is user's liabilities to take all necessary measures to meet local required laws and regulations. The producer is not responsable for any damage and loss due to the use of information mentioned in this safety data sheet.

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.
Ox. Sol. 3	Oxidising Solids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Eye Dam. 1	H318	Calculation method

Safety Data Sheet (SDS), EU

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.