

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
 Trade name : SCALE BREAKER - DS43
 Product code : DS43
 UFI Number : 6GMP-0107-R00P-P2YH
 Product group : Trade product

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Professional use
 Industrial/Professional use spec : For professional use only
 Use of the substance/mixture : Viscous Multi-purpose bactericidal acidic cleaner and descaler. Safe on ceramic, porcelain and stainless steel toilet bowls and urinals.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Bio-Productions
 72 Victoria Road
 Burgess Hill - United Kingdom
 T 0044 (0) 1444 244000 - F 0044 (0) 1444 244999
technical@bio-productions.com - www.bio-productions.com

1.4. Emergency telephone number

Emergency number : 0044 (0) 1444 244000 (office hours only)

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 1A H314
 Hazardous to the aquatic environment — Chronic Hazard, Category 3 H412

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

Adverse physicochemical, human health and environmental effects

Causes severe skin burns and eye damage. Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) : Danger

Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage
 H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (CLP) : P102 – Keep out of reach of children
 P260 - Do not breathe fume, mist, spray, vapours
 P264 - Wash hands, forearms and face thoroughly after handling
 P273 - Avoid release to the environment
 P280 - Wear protective gloves, protective clothing, eye protection, face protection
 P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
 P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

SCALE BREAKER - DS43

Safety Data Sheet

according to Regulation (EU) 2015/830

Rinse skin with water/shower
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
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, a doctor
P501 - Dispose of contents/container to an approved waste disposal plant

Detergent Regulation: Labelling of contents

Contents: Non-ionic surfactants <5%
Perfumes, Citronellol.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
sulphamidic acid, sulphamic acid, sulfamic acid	(CAS No) 5329-14-6 (EC no) 226-218-8 (EC index no) 016-026-00-0 (REACH-no) 01-2119488633-28	5 - 10	Eye Irrit. 2, H319 Skin Irrit. 2, H315 Aquatic Chronic 3, H412
CITRIC ACID	(CAS No) 5949-29-1 (EC no) 201-069-1 (REACH-no) 01-2119457026-42	1 - 3	Eye Irrit. 2, H319
C12-C16 alkylbenzyl dimethyl, chlorides (CAS No 68424-85-1)		1 - 3	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
ALCOHOLS C12 - 14 (7 - 7.5 EO)	(CAS No) 68439-50-9	1 - 3	Eye Dam. 1, H318 Aquatic Chronic 3, H412
3-butoxypropan-2-ol, propylene glycol monobutyl ether substance with a Community workplace exposure limit	(CAS No) 5131-66-8 (EC no) 225-878-4 (EC index no) 603-052-00-8 (REACH-no) 01-2119475527-28	0.1 - 1	Eye Irrit. 2, H319

Specific concentration limits:

Name	Product identifier	Specific concentration limits
C12-C16 alkylbenzyl dimethyl, chlorides (CAS No 68424-85-1)		(0.25 =<C < 2.5) Aquatic Chronic 3, H412

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after skin contact : Burns.
Symptoms/injuries after eye contact : Serious damage to eyes.
Symptoms/injuries after ingestion : Burns.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

SCALE BREAKER - DS43

Safety Data Sheet

according to Regulation (EU) 2015/830

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

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. Do not breathe fume, mist, spray, vapours.

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 : Take up liquid spill into absorbent material.

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

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe fume, mist, spray, vapours. Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. 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 locked up. 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

3-butoxypropan-2-ol, propylene glycol monobutyl ether (5131-66-8)		
EU	IOELV TWA (ppm)	10 ppm

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls:

Avoid release to the environment.

SCALE BREAKER - DS43

Safety Data Sheet

according to Regulation (EU) 2015/830

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Green.
Odour	: Floral.
Odour threshold	: No data available
pH	: 1 - 2
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: < 0 °C
Boiling point	: > 100 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: ≈ 1.04 g/ml
Solubility	: Soluble in water.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

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

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

sulphamic acid, sulphamic acid, sulfamic acid (5329-14-6)

LD50 oral	> 2000 mg/kg bodyweight
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CITRIC ACID (5949-29-1)

LD50 oral rat	11700 mg/kg
LD50 dermal rat	> 2000 mg/kg

ALCOHOLS C12 - 14 (7 - 7.5 EO) (68439-50-9)

LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

SCALE BREAKER - DS43

Safety Data Sheet

according to Regulation (EU) 2015/830

3-butoxypropan-2-ol, propylene glycol monobutyl ether (5131-66-8)	
LD50 oral rat	3300 mg/kg
LD50 dermal rat	> 2000
LC50 inhalation rat (Vapours - mg/l/4h)	> 3.5 mg/l/4h

Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: 1 - 2
Serious eye damage/irritation	: Serious eye damage, category 1, implicit pH: 1 - 2
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

sulphamic acid, sulphamic acid, sulfamic acid (5329-14-6)	
LC50 fish 1	70.3 mg/l

CITRIC ACID (5949-29-1)	
LC50 fish 1	440 - 706
EC50 Daphnia 1	1535 mg/l

3-butoxypropan-2-ol, propylene glycol monobutyl ether (5131-66-8)	
LC50 fish 1	> 560 mg/l
EC50 Daphnia 1	> 1000 mg/l

12.2. Persistence and degradability

SCALE BREAKER - DS43	
Persistence and degradability	The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

C12-C16 alkylbenzylidimethyl, chlorides (CAS No 68424-85-1)	
Persistence and degradability	Biodegradable.

12.3. Bioaccumulative potential

sulphamic acid, sulphamic acid, sulfamic acid (5329-14-6)	
Log Pow	0.1

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

SCALE BREAKER - DS43	
Results of PBT assessment	The product does not meet the PBT and vPvB classification criteria

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

No additional information available

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

SCALE BREAKER - DS43

Safety Data Sheet

according to Regulation (EU) 2015/830

14.1. UN number

UN-No. (ADR)	: Not applicable
UN-No. (IMDG)	: Not applicable
UN-No. (IATA)	: Not applicable
UN-No. (ADN)	: Not applicable
UN-No. (RID)	: Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
Proper Shipping Name (ADN)	: Not applicable
Proper Shipping Name (RID)	: Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	: Not applicable
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IMDG

Transport hazard class(es) (IMDG)	: Not applicable
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IATA

Transport hazard class(es) (IATA)	: Not applicable
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ADN

Transport hazard class(es) (ADN)	: Not applicable
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RID

Transport hazard class(es) (RID)	: Not applicable
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14.4. Packing group

Packing group (ADR)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable
Packing group (ADN)	: Not applicable
Packing group (RID)	: Not applicable

14.5. Environmental hazards

Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available

14.6. Special precautions for user

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

SCALE BREAKER - DS43

Safety Data Sheet

according to Regulation (EU) 2015/830

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV 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:

Revision - See : *.Changes made to section 2 & 3. Reclassification based on extreme pH.

Changes from previous version

- UFI Number added to section 1.1
- P-Statements added in Section 2.2

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
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
EC50	Median effective concentration
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rai
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

Other information : In compliance with EN 1276, EN 13697 and EN 13727 (MRSA).

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
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
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

SDS EU (Reach Annex II) GREEN

SCALE BREAKER - DS43

Safety Data Sheet

according to Regulation (EU) 2015/830

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