



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Revision date: 02/03/2021 Version: 10.5

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

1.1. Product identifier

Product form	:	Mixture
Trade name	:	STRONGARM
UFI	:	0GW3-X0Y0-1003-PP7Q
Product code	:	F040
Type of product	:	Detergent

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

1.2.1. Relevant identified uses

Main use category Industrial/Professional use spec Use of the substance/mixture : Professional use

: For professional use only

: Heavy-duty detergent

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

SELDEN RESEARCH LIMITED

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1.4. Emergency telephone number

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SECTION 2: Hazards identification

2.1.	Classification	of the sub	ostance or	mixture
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Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 1, Sub-Category 1B	H314
Serious eye damage/eye irritation, Category 1	H318
Full text of H statements : see section 16	

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Labe	l element	S
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Labelling according to Regulation	on (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



: Alcohol Alkoxylate; sodium hydroxide; caustic soda

: H314 - Causes severe skin burns and eye damage.

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Precautionary statements (CLP) :	 P264 - Wash hands thoroughly after handling. P280 - Wear eye protection, protective gloves. 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. Rinse skin with water or shower. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P315 - Get immediate medical advice/attention. P405 - Store locked up.
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2.3. Other hazards

No additional information available

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]
Butoxydiglycol substance with national workplace exposure limit(s) (IE, GB)	(CAS-No.) 112-34-5 (EC-No.) 203-961-6 (EC Index-No.) 603-096-00-8 (REACH-no) 01-2119475104-44	1 – 5	Eye Irrit. 2, H319
Alcohol Alkoxylate	(CAS-No.) 166736-08-9 (REACH-no) Exempt/Polymer	1 – 5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
sodium hydroxide; caustic soda substance with national workplace exposure limit(s) (IE, GB)	(CAS-No.) 1310-73-2 (EC-No.) 215-185-5 (EC Index-No.) 011-002-00-6 (REACH-no) 01-2119457892-27	1 – 5	Skin Corr. 1A, H314
N,N-dimethyldecylamine N-oxide	(CAS-No.) 2605-79-0 (EC-No.) 220-020-5 (REACH-no) 01-2119959297-22	0.1 – 1	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400

Specific concentration limits:		
Name	Product identifier	Specific concentration limits
Alcohol Alkoxylate	(CAS-No.) 166736-08-9 (REACH-no) Exempt/Polymer	(1 <c 10)="" 2,="" eye="" h319<br="" irrit.="" ≤="">(10 <c 1,="" 100)="" <="" dam.="" eye="" h318<="" td=""></c></c>
sodium hydroxide; caustic soda	(CAS-No.) 1310-73-2 (EC-No.) 215-185-5 (EC Index-No.) 011-002-00-6 (REACH-no) 01-2119457892-27	(0.5 ≤C < 2) Skin Irrit. 2, H315 (0.5 ≤C < 2) Eye Irrit. 2, H319 (2 ≤C < 5) Skin Corr. 1B, H314 (5 ≤C ≤ 100) Skin Corr. 1A, H314

Full text of H-statements: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general First-aid measures after inhalation First-aid measures after skin contact	 Get medical advice/attention if you feel unwell. Remove person to fresh air and keep comfortable for breathing. Wash skin with plenty of water. Take off immediately all contaminated clothing and wash it before reuse. Get medical advice/attention.

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First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
First-aid measures after ingestion	: Do NOT induce vomiting. Rinse mouth. Drink plenty of water. Get medical advice/attention.
4.2. Most important symptoms and effe	cts, both acute and delayed
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects 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	: Carbon dioxide. Dry powder. Foam.
5.2. Special hazards arising from the substa	nce or mixture
Hazardous decomposition products in case of fire	: Corrosive vapours.
5.3 Advice for firefighters	

No additional information available

SECTION 6: Accidental release measures	
6.1. Personal precautions, protectiv	ve equipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	: Use personal protective equipment as required.
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for containment and cleaning up	
For containment	: Collect spillage.
Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.
6.4. Reference to other sections	

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and stor	age	
7.1. Precautions for safe handling		
Precautions for safe handling Hygiene measures	Avoid contact with skin and eyes.Do not eat, drink or smoke when using this product.	
7.2. Conditions for safe storage, in	ncluding any incompatibilities	
Technical measures Storage conditions Incompatible products Incompatible materials	 Does not require any specific or particular technical measures. Keep container closed when not in use. Oxidizing agent. Strong acids. Metals. 	
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Special rules on packaging

: Keep only in original container.

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

Butoxydiglycol (112-34-5)		
Ireland - Occupational Exposure Limits		
Local name	2-(2-Butoxyethoxy)ethanol	
OEL TWA [1]	67.5 mg/m³	
OEL TWA [2]	10 ppm	
OEL STEL	101.2 mg/m³	
OEL STEL [ppm]	15 ppm	
Notes (IE)	IOELV	
United Kingdom - Occupational Exposure Limits		
Local name	2-(2-Butoxyethoxy)ethanol	
WEL TWA (OEL TWA) [1]	67.5 mg/m³	
WEL TWA (OEL TWA) [2]	10 ppm	
WEL STEL (OEL STEL)	101.2 mg/m ³	
WEL STEL (OEL STEL) [ppm]	15 ppm	

sodium hydroxide; caustic soda (1310-73-2)		
Ireland - Occupational Exposure Limits		
Local name Sodium hydroxide		
OEL STEL	2 mg/m³	
United Kingdom - Occupational Exposure Limits		
Local name	Sodium hydroxide	
WEL STEL (OEL STEL)	2 mg/m³	

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

No additional information available

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8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses. EN 166

8.2.2.2. Skin protection

Skin and body protection:

Not required for normal conditions of use

Hand protection:

Chemical resistant gloves (according to European standard EN 374 or equivalent). Nitrile rubber gloves

Other skin protection	
Materials for protective clothing:	
Not required for normal conditions of use	
8.2.2.3. Respiratory protection	
Respiratory protection:	
Not required for normal conditions of use	

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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Physical state	: Liquid
Appearance	: Liquid.
Colour	: Colourless.
Odour	: characteristic.
Odour threshold	: No data available
рН	: 13
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: ≥ 100 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1.05
Solubility	: Soluble in water.
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Partition coefficient n-octanol/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

Acids.

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 toxicological effects

Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	:	Not classified Not classified Not classified
Skin corrosion/irritation	:	Causes severe skin burns. pH: 13
Serious eye damage/irritation	:	Causes serious eye damage. pH: 13
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	Not classified
Aspiration hazard	:	Not classified

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SECTION 12: Ecological information

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

Butoxydiglycol (112-34-5)	
LC50 - Fish [1]	1300 mg/l
EC50 - Other aquatic organisms [1]	> 1000 mg/l waterflea
EC50 - Other aquatic organisms [2]	> 100 mg/l

Alcohol Alkoxylate (166736-08-9)	
LC50 - Fish [1]	10 – 100 mg/l
EC50 - Crustacea [1]	10 – 100 mg/l
ErC50 other aquatic plants	10 – 100 mg/l

sodium hydroxide; caustic soda (1310-73-2)	
LC50 - Fish [1]	> 35 mg/l
EC50 - Other aquatic organisms [1]	> 33 mg/l waterflea

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential		
Butoxydiglycol (112-34-5)		
Partition coefficient n-octanol/water (Log Pow)	0.56	
sodium hydroxide; caustic soda (1310-73-2)		

Partition coefficient n-octanol/water (Log Pow)	-3.88

N,N-dimethyldecylamine N-oxide (2605-79-0)	
Partition coefficient n-octanol/water (Log Pow)	3.69

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

No additional information available

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SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

14.1 UN number	
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA)	: UN 1760 : UN 1760 : UN 1760
14.2. UN proper shipping name	
Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Transport document description (ADR) Transport document description (IMDG) Transport document description (IATA)	 CORROSIVE LIQUID, N.O.S. CORROSIVE LIQUID, N.O.S. Corrosive liquid, n.o.s. UN 1760 CORROSIVE LIQUID, N.O.S. (SODIUM HYDROXIDE), 8, III, (E) UN 1760 CORROSIVE LIQUID, N.O.S. (SODIUM HYDROXIDE), 8, III UN 1760 Corrosive liquid, n.o.s., 8, III
14.3. Transport hazard class(es)	
ADR Transport hazard class(es) (ADR) Danger labels (ADR)	
IMDG Transport hazard class(es) (IMDG) Danger labels (IMDG)	: 8 : 8
ΙΑΤΑ	\bullet
Transport hazard class(es) (IATA) Danger labels (IATA)	: 8 : 8
14.4. Packing group	
Packing group (ADR) Packing group (IMDG) Packing group (IATA)	: III : III : III
14.5. Environmental hazards	
Dangerous for the environment Marine pollutant	: No : No

: No supplementary information available

Other information

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14.6. Special precautions for user

Overland transport		
Classification code (ADR)	:	C9
Special provisions (ADR)	:	274
Limited quantities (ADR)	:	51
Excepted quantities (ADR)	:	E1
Packing instructions (ADR)	:	P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	:	MP19
Portable tank and bulk container instructions (ADR)	:	T7
Portable tank and bulk container special provisions	:	TP1, TP28
(ADR)		
Tank code (ADR)	:	L4BN
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	3
Special provisions for carriage - Packages (ADR)	:	V12
Hazard identification number (Kemler No.)	:	80
Orange plates	:	80 1760
Tunnel restriction code (ADR)	:	E
EAC code	:	2X
APP code	:	В
Transport by sea		
Special provisions (IMDG)	:	223, 274
Limited quantities (IMDG)		5 L
Excepted quantities (IMDG)		E1
Packing instructions (IMDG)		P001, LP01
IBC packing instructions (IMDG)		IBC03
Tank instructions (IMDG)		Τ7
Tank special provisions (IMDG)	:	TP1, TP28
EmS-No. (Fire)		F-A
EmS-No. (Spillage)	:	S-B
Stowage category (IMDG)	:	A
Air transport		
PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)		Y841
PCA limited quantity max net quantity (IATA)	:	1L
PCA packing instructions (IATA)	:	852
PCA max net quantity (IATA)	:	5L
CAO packing instructions (IATA)		856
CAO max net quantity (IATA)		60L
Special provisions (IATA)		A3
ERG code (IATA)		8L
· /		

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

IBC code

: 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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

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Detergent Regulation (648/2004/EC): Labelling of contents:	
Component	%
non-ionic surfactants	<5%

15.1.2. National regulations

United Kingdom

British National Regulations

: Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008.

Detergent Regulation (648/2004/EC).

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

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	
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 1, Sub-Category 1A	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-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.	

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:			
Skin Corr. 1B	H314	Calculation method	
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.