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

1.1. Product identifier

Mixture identification:

Trade name: SMAC GEL WITH BLEACH

Product code: 3F0016

Product type and use: Surface cleaner

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

Recommended use:

See label: instructions and precautions

Uses advised against:

Uses different from those indicated on the packaging or recommended in this document.

1.3. Details of the supplier of the safety data sheet

Company:

BOLTON MANITOBA SPA

Via Pirelli, 19

20124 Milano - Italy

Tel. +39 02 6709 333 - Fax +39 0362 378 228

Distributor:

Alf.Mizzi & Sons (Mktg) Group

Zachary House

Marsa Industrial Estate -

MARSA LQA 06 -MALTA - tel. 00356 2554 0000

+39 02 6709 333

Competent person responsible for the safety data sheet:

safetyinfo@boltonmanitoba.it

1.4. Emergency telephone number

+39 02 6709 333

00356 2554 0000

030 274 8888

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

Warning, Skin Irrit. 2, Causes skin irritation.

Danger, Eye Dam. 1, Causes serious eye damage.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:

Danger

Hazard statements:

H315 Causes skin irritation.

H318 Causes serious eye damage.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P280 Wear protective gloves and eye protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
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 / doctor.

Special Provisions:
EUH206 Warning! Do not use together with other products. May release dangerous gases (chlorine).

Contains
sodium hypochlorite
sodium hydroxide; caustic soda

2.3. Other hazards
vPvB Substances: None - PBT Substances: None

Other Hazards:
No other hazards

Composition labelling (Detergent Regulation 648/2004/EC).
Ingredients - 648/2004/EC (www.boltondet.com):
< 5 % anionic surfactants, non-ionic surfactants, chlorine-based bleaching
Also contains: perfumes

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures
Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 1% - < 5%	sodium hypochlorite	Index number: 017-011-00-1 CAS: 7681-52-9 EC: 231-668-3	3.2/1B Skin Corr. 1B H314 4.1/A1 Aquatic Acute 1 H400 M=10. EUH031
>= 1% - < 5%	sodium hydroxide; caustic soda	Index number: 011-002-00-6 CAS: 1310-73-2 EC: 215-185-5	3.2/1A Skin Corr. 1A H314
>= 0.1% - < 1%	C12-16 ALKYL DIMETHYLAMINE OXIDE	CAS: 85408-49-7 EC: 287-011-6	3.1/4/Oral Acute Tox. 4 H302 3.2/2 Skin Irrit. 2 H315 3.3/1 Eye Dam. 1 H318 4.1/A1 Aquatic Acute 1 H400 4.1/C2 Aquatic Chronic 2 H411
>= 0.1% - < 1%	ALKYL DIMETHYLAMINE OXIDE	CAS: 68955-55-5 EC: 931-341-1	3.1/4/Oral Acute Tox. 4 H302 3.2/2 Skin Irrit. 2 H315 4.1/C2 Aquatic Chronic 2 H411 M=1. 3.3/1 Eye Dam. 1 H318 4.1/A1 Aquatic Acute 1 H400 M=1.

For full text of the R, H and EUH sentences mentioned in this Section, see Section 16. Exposure limits in the workplace, if available, are listed in Section 8.1.
[1] Exempted: ionic mixture. See Regulation 1907/2006/EC, Annex 5, paragraphs 3 and 4 and "Guidance for Annex V - Exemptions from the obligation to register" (http://echa.europa.eu/documents/10162/13632/annex_v_en. pdf). This salt is potentially present on the basis of calculations and is included in the list of substances for the purposes of classification and labeling only. The starting substances of the ionic mixture are registered or exempted.
[2] Exempted: Included in Annex IV of Regulation 1907/2006/EC.
[3] Exempted: Included in Annex V of Regulation 1907/2006/EC.
[4] Polymer, exempted under Article. 2.9 of Regulation 1907/2006/EC.

SECTION 4: First aid measures

4.1. Description of first aid measures
In case of skin contact:
Immediately take off all contaminated clothing.
OBTAIN IMMEDIATE MEDICAL ATTENTION.
Remove contaminated clothing immediately and dispose off safely.
After contact with skin, wash immediately with soap and plenty of water.
In case of eyes contact:
After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.
Protect uninjured eye.
In case of Ingestion:
Do NOT induce vomiting.
In case of Inhalation:
Remove casualty to fresh air and keep warm and at rest.
4.2. Most important symptoms and effects, both acute and delayed
None
4.3. Indication of any immediate medical attention and special treatment needed
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Treatment:
None

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media:
Water.
Carbon dioxide (CO2).
Extinguishing media which must not be used for safety reasons:
None in particular.
5.2. Special hazards arising from the substance or mixture
Do not inhale explosion and combustion gases.
Burning produces heavy smoke.
5.3. Advice for firefighters
Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment.

Remove persons to safety.
See protective measures under point 7 and 8.

6.2. Environmental precautions
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up
Wash with plenty of water.

6.4. Reference to other sections
See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Avoid contact with skin and eyes, inhalation of vapours and mists.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contamined clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities
Keep in a fresh and ventilated area.
Avoid direct sunlight.
Keep container tightly closed.
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Adequately ventilated premises.

7.3. Specific end use(s)
None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
sodium hydroxide; caustic soda - CAS: 1310-73-2
ACGIH - STEL: Ceiling 2 mg/m3 - Notes: URT, eye, and skin irr

DNEL Exposure Limit Values
sodium hypochlorite - CAS: 7681-52-9
Worker Industry: 1.55 03 - Consumer: 1.55 03 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Industry: 1.55 03 - Consumer: 1.55 03 - Exposure: Human Inhalation - Frequency: Long Term, local effects
Worker Industry: 3.1 03 - Exposure: Human Inhalation - Frequency: Short Term, local effects
Consumer: 3.1 19141.05 - Exposure: Human Dermal - Frequency: Long Term, local effects
Consumer: 0.26 19141.05 - Exposure: Human Oral - Frequency: Long Term, systemic effects
sodium hydroxide; caustic soda - CAS: 1310-73-2
Worker Industry: 1 03 - Consumer: 1 03 - Exposure: Human Inhalation
C12-16 ALKYL DIMETHYLAMINE OXIDE - CAS: 85408-49-7
Worker Industry: 11 19141.05 - Consumer: 5.5 19141.05 - Exposure: Human Dermal -

Frequency: Long Term, systemic effects
Worker Industry: 15.5 03 - Consumer: 3.825 03 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Consumer: 0.44 19141.05 - Exposure: Human Oral - Frequency: Long Term, systemic effects

ALKYL DIMETHYLAMINE OXIDE - CAS: 68955-55-5
Worker Industry: 11 19141.05 - Consumer: 5.5 19141.05 - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Industry: 15.5 03 - Consumer: 3.8 03 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Consumer: 0.44 19141.05 - Exposure: Human Oral - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

sodium hypochlorite - CAS: 7681-52-9
Target: Fresh Water - Value: 0.00021 mg/l
Target: Marine water - Value: 0.000042 mg/l

C12-16 ALKYL DIMETHYLAMINE OXIDE - CAS: 85408-49-7
Target: Fresh Water - Value: 0.0335 mg/l
Target: Freshwater sediments - Value: 5.24 mg/kg
Target: Marine water sediments - Value: 0.524 mg/kg
Target: Soil (agricultural) - Value: 1.02 mg/kg
Target: Microorganisms in sewage treatments - Value: 24 mg/l

ALKYL DIMETHYLAMINE OXIDE - CAS: 68955-55-5
Target: Fresh Water - Value: 0.0335 mg/l
Target: Freshwater sediments - Value: 5.24 mg/kg
Target: Marine water sediments - Value: 0.524 mg/kg
Target: Microorganisms in sewage treatments - Value: 24 mg/l
Target: Soil (agricultural) - Value: 1.02 mg/kg

8.2. Exposure controls

Eye protection:
Basket eye glasses.
Face protection shield.

Protection for skin:
Safety shoes.
Protective apron.

Protection for hands:
Suitable gloves type:
waterproof gloves
Gloves with long cuffs.
Suitable material:
CR (polychloroprene, chloroprene rubber).
Butyl caoutchouc (butyl rubber).
PE (polyethylene).

Respiratory protection:
Not needed for normal use.

Thermal Hazards:
None

Environmental exposure controls:
None

Appropriate engineering controls:
None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance:	Transparent liquid	--	--
Colour:	Yellow	--	--
Odour:	Characteristic of chlorine	--	--
Odour threshold:	N.D.	--	smell distinctly perceptible under normal use conditions.
pH:	13.0	--	the product as such (100%)
Melting point / freezing point:	Not Relevant	--	mixture of many different substances
Initial boiling point and boiling range:	Not Relevant	--	mixture of many different substances
Flash point:	Not Relevant	--	Will not burn
Evaporation rate:	N.D.	--	poorly volatile
Solid/gas flammability:	Not applicable	--	liquid product
Upper/lower flammability or explosive limits:	Not Relevant	--	it does not burn
Vapour pressure:	N.D. bar / 20℃	--	lower than water: < 2300 mPa
Vapour density:	Not Relevant	--	This property is not pertinent or not relevant to the safety and product classification
Relative density:	1.044 kg/l	--	0
Solubility in water:	Complete	--	--
Solubility in oil:	Insoluble	--	--
Partition coefficient (n-octanol/water):	Not applicable	--	mixture of many different substances
Auto-ignition temperature:	Not applicable	--	not flammable
Decomposition temperature:	N.D. (>40℃)	--	very slow decomposition
Viscosity:	450 cps	--	@20℃
Explosive properties:	Not applicable	--	No known risk of dust formation

			or explosive atmospheres
Oxidizing properties:	Not applicable	--	It does not contain oxidizing substances

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	Not Relevant	--	--
Fat Solubility:	Not Relevant	--	--
Conductivity:	Not Relevant	--	--
Substance Groups relevant properties	Not Relevant	--	--

SECTION 10: Stability and reactivity

10.1. Reactivity

IContact with acids liberates toxic gas (chlorine)! It can react with oxidizable metals, with reducing agents. Use only under the conditions and for the intended uses.

10.2. Chemical stability

The product is stable in normal conditions of use and storage (between -10 °C and + 30 °C). It may decompose slowly at temperatures above 40-50 ° C with gas evolution.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Keep in a ventilated area, away from heat, moisture.
Avoid conditions of handling, storage and use other than those explicitly indicated on the label and / or in Sections 7 and 8

10.5. Incompatible materials

materiali sensibili agli ossidanti, come prodotti riducenti, ammine, metalli facilmente ossidabili, metalli pesanti
materials sensitive to strong bases or incompatible with the alkaline environment (eg. acids).

10.6. Hazardous decomposition products

By thermal decomposition or in case of fire can be released vapors potentially dangerous to health.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

Not applicable

Toxicological information of the main substances found in the product:

sodium hypochlorite - CAS: 7681-52-9

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 1100 mg/kg
Test: LD50 - Route: Inhalation - Species: Rat > 10.5 mg/l - Duration: 1h
Test: LD50 - Route: Skin - Species: Rabbit > 20000 mg/kg

f) carcinogenicity:

Test: 16 - Route: Oral - Species: Rat = 50 mg/kg

g) reproductive toxicity:

Test: 16 - Route: Oral - Species: Rat = 5 mg/kg

sodium hydroxide; caustic soda - CAS: 1310-73-2
a) acute toxicity:
Test: LD50 - Route: Skin - Species: Rabbit = 1350 mg/kg
C12-16 ALKYL DIMETHYLAMINE OXIDE - CAS: 85408-49-7
a) acute toxicity:
Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg
Test: LD50 - Route: Oral - Species: Rat = 1064 mg/kg
ALKYL DIMETHYLAMINE OXIDE - CAS: 68955-55-5
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 846 mg/kg
Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:
a) acute toxicity;
b) skin corrosion/irritation;
c) serious eye damage/irritation;
d) respiratory or skin sensitisation;
e) germ cell mutagenicity;
f) carcinogenicity;
g) reproductive toxicity;
h) STOT-single exposure;
i) STOT-repeated exposure;
j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity
Adopt good working practices, so that the product is not released into the environment.
SMAC GEL WITH BLEACH
a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Daphnia = 2 mg/l - Duration h: 48
sodium hypochlorite - CAS: 7681-52-9
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 0.011-0.1 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia = 0.011-0.1 mg/l - Duration h: 48
sodium hydroxide; caustic soda - CAS: 1310-73-2
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 189 mg/l - Duration h: 48
C12-16 ALKYL DIMETHYLAMINE OXIDE - CAS: 85408-49-7
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 3.5 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia = 10.8 mg/l - Duration h: 48
Endpoint: EC50 - Species: Algae = 0.4 mg/l - Duration h: 72
ALKYL DIMETHYLAMINE OXIDE - CAS: 68955-55-5
a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Algae = 0.24 mg/l - Duration h: 72
Endpoint: EC50 - Species: Daphnia = 2.4 mg/l - Duration h: 48
Endpoint: LC50 - Species: Fish = 1.26 mg/l - Duration h: 96

12.2. Persistence and degradability
None
Not applicable
12.3. Bioaccumulative potential
Not applicable
12.4. Mobility in soil

Not applicable

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number

ADR/RID-UN number:	1791
IATA-Un number:	1791
IMDG-Un number:	1791

14.2. UN proper shipping name

ADR-Shipping Name:	HYPOCHLORITE SOLUTION (sodium hypochlorite)
IATA-Technical name:	HYPOCHLORITE SOLUTION (sodium hypochlorite)
IMDG-Technical name:	HYPOCHLORITE SOLUTION (sodium hypochlorite)

14.3. Transport hazard class(es)

ADR/RID-Class:	8
ADR-Label:	8
IATA-Class:	8
IMDG-Class:	8

14.4. Packing group

ADR/RID-Packing Group:	III
IATA-Packing group:	III
IMDG-Packing group:	III

14.5. Environmental hazards

Marine pollutant:	No

14.6. Special precautions for user

ADR-Tunnel Restriction Code:	(E)
IMDG-Technical name:	HYPOCHLORITE SOLUTION (sodium hypochlorite)
IMDG-EMS:	F-A, S-B

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

Not applicable

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) 2015/830
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:
Restriction 3
Restriction 40
Restrictions related to the substances contained:
No restriction.

Where applicable, refer to the following regulatory provisions :
Directive 2012/18/EU (Seveso III)
Regulation (EC) nr 648/2004 (detergents).
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.
Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):
Not applicable

15.2. Chemical safety assessment
No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Text of phrases referred to under heading 3:
H314 Causes severe skin burns and eye damage.
H400 Very toxic to aquatic life.
EUH031 Contact with acids liberates toxic gas.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H411 Toxic to aquatic life with long lasting effects.

Hazard class and hazard category	**Code**	**Description**
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	**Classification procedure**
Skin Irrit. 2, H315	On basis of test data
Eye Dam. 1, H318	Calculation method

This document was prepared by a competent person who has received appropriate training.
Main bibliographic sources:
ACGIH - Threshold Limit Values for Chemical Substances (www.acgih.org)
The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.
It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.
This SDS cancels and replaces any preceding release.
User is responsable of complying all current and pertaining legislations, regulations and directives.
Company is not liable for any damage to persons or goods, caused by improper usage of information given in this safety data sheet.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
N.A.:	Not applicable
N.D.:	Not available
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.