

**SAFETY DATA SHEET**

Muc-Off Visor, Lens & Goggle Cleaner

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Compilation date: 03/02/2015

Revision No: 1

Section 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier****Product name:** Muc-Off Visor, Lens & Goggle Cleaner**Product code:** 212, 219, 202**1.2. Relevant identified uses of the substance or mixture and uses advised against****1.3. Details of the supplier of the safety data sheet****Company name:**

Muc-Off Ltd.
Unit 1, 1st Floor, Concept Office Park,
Innovation Close,
BH12 4QT
United Kingdom

Tel: +44(0)1202 307790**Email:** info@muc-off.com**1.4. Emergency telephone number****Emergency tel:** +44(0)1202 307790

(office hours only)

Section 2: Hazards identification**2.1. Classification of the substance or mixture****Classification under CHIP:** This product has no classification under CHIP.**Classification under CLP:** This product has no classification under CLP.**2.2. Label elements****Label elements:** This product has no label elements.**2.3. Other hazards****PBT:** This product is not identified as a PBT/VPVB substance.**Section 3: Composition/information on ingredients****3.2. Mixtures**

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Hazardous ingredients:

QUATERNARY AMMONIUM COMPOUNDS

EINECS	CAS	CHIP Classification	CLP Classification	Percent
264-151-6	63449-41 -2	Xn: R21/22; C: R34; N: R50	Acute Tox. 4: H312; Acute Tox. 4: H302; Skin Corr. 1B: H314; Aquatic Acute 1: H400	<1%

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water.

Eye contact: Bathe the eye with running water for 15 minutes.

Ingestion: Wash out mouth with water.

Inhalation: Move to fresh air in case of accidental inhalation of vapours.

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

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be irritation of the throat.

Inhalation: No symptoms.

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

Immediate / special treatment: Not applicable.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

[cont...]

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6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Not applicable.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Respiratory protection: Respiratory protection not required.

Hand protection: Protective gloves.

Eye protection: Safety glasses. Ensure eye bath is to hand.

Skin protection: Protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Blue

Odour: Odourless

Evaporation rate: Slow

Oxidising: Not applicable.

Solubility in water: Highly soluble

Viscosity: Non-viscous

Boiling point/range°C: 100

Flammability limits %: lower: Not applicable.

Flash point°C: Not applicable.

Autoflammability°C: Not applicable.

Relative density: 1.00

Melting point/range°C: 0

upper: Not applicable.

Part.coeff. n-octanol/water: No data available.

Vapour pressure: No data available.

[cont...]

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pH: Approx. 7

VOC g/l: Not applicable.

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

QUATERNARY AMMONIUM COMPOUNDS

DERMAL	RAT	LD50	1560	mg/kg
ORAL	RAT	LD50	795	mg/kg

Toxicity values: No data available.

Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be irritation of the throat.

Inhalation: No symptoms.

Section 12: Ecological information

[cont...]

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12.1. Toxicity

Hazardous ingredients:

QUATERNARY AMMONIUM COMPOUNDS

DAPHNIA	48H EC50	0.03	mg/l
GREEN ALGA (Selenastrum capricornutum)	96H ErC50	0.06	mg/l
RAINBOW TROUT (Oncorhynchus mykiss)	96H LC50	1.7	mg/l

12.2. Persistence and degradability

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, (or are undergoing testing to obtain a derogation within the terms of the directive). 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.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

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

15.2. Chemical Safety Assessment

Section 16: Other information

[cont...]

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Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: H302: Harmful if swallowed.
H312: Harmful in contact with skin.
H314: Causes severe skin burns and eye damage.
H400: Very toxic to aquatic life.
R21/22: Harmful in contact with skin and if swallowed.
R34: Causes burns.
R50: Very toxic to aquatic organisms.

Legend to abbreviations: PNEC = predicted no effect concentration

DNEL = derived no effect level

LD50 = median lethal dose

LC50 = median lethal concentration

EC50 = median effective concentration

IC50 = median inhibitory concentration

dw = dry weight

bw = body weight

cc = closed cup

oc = open cup

MUS = mouse

GPG = guinea pig

RBT = rabbit

HAM = hamster

HMN = human

MAM = mammal

PGN = pigeon

IVN = intravenous

SCU = subcutaneous

SKN = skin

DRM = dermal

OCC = ocular/corneal

OPT = optical

INH = inhalation

PCP = physico-chemical properties

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.



Safety Data Sheet

acc. to OSHA HCS

Printing date 07/05/2023

Reviewed on 07/05/2023

1 Identification

- Product identifier
- Trade name: **Muc-Off Foam Fresh Cleaner**
- Article number: 199US
- Application of the substance / the mixture Glass Cleaner
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
Muc-Off Ltd
UK - Muc-Off Ltd, Unit 23 Branksome Business Park, Bourne Valley Road, Poole, Dorset, BH12 1DW
EU- Muc-Off Ltd, Unit 3D North Point House, North Point Business Park, New Mallow Road, Cork, Ireland, T23 AT2P Tel: +44(0)1202 307790 Email: info@muc-off.com
- Information department:
- Research & Development/E-mail: info@muc-off.com
- Emergency telephone number: CHEMTREC: 1-800-424-9300 24HR

2 Hazard(s) identification

- Classification of the substance or mixture



GHS02 Flame

Flammable Aerosols 1

H222 Extremely flammable aerosol.



GHS04 Gas cylinder

Gases under Pressure - Liquefied gas H280 Contains gas under pressure; may explode if heated.

- Label elements

- GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms



GHS02



GHS04

- Signal word Danger

- Hazard statements

H222 Extremely flammable aerosol.

H280 Contains gas under pressure; may explode if heated.

- Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Pressurized container: Do not pierce or burn, even after use.

P261 Avoid breathing mist/vapours/spray.

P280 Wear eye protection / face 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.

P403 Store in a well-ventilated place.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

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Trade name: Muc-Off Foam Fresh Cleaner

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- Classification system:
- NFPA ratings (scale 0 - 4)



Health = 0
Fire = 4
Reactivity = 0

- WHMIS-ratings (scale 0 - 4)



Health = *0
Fire = 4
Reactivity = 3

- Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Active substance with propellant

· Dangerous components:

67-63-0	propan-2-ol	2.5-<10%
106-97-8	butane (containing < 0.1% butadiene (203-450-8), Note K)	2.5-<10%
74-98-6	propane	2.5-<10%
1471311-93-9	2,5-Furandione, reaction products with 2-ethyl-1-hexanamine and triethanolamine	0.1-<1%
75-28-5	isobutane (containing < 0,1 % butadiene (203-450-8), Note K)	0.1-<1%

4 First-aid measures

- Description of first aid measures
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: Do not induce vomiting; immediately call for medical help.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents:
 - Water haze
 - Fire-extinguishing powder
 - Carbon dioxide
 - Alcohol resistant foam
- For safety reasons unsuitable extinguishing agents: Water with full jet
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- Protective equipment: Mount respiratory protective device.

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6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· PAC-1:

67-63-0	propan-2-ol	400 ppm
106-97-8	butane (containing < 0.1% butadiene (203-450-8), Note K)	5500* ppm
74-98-6	propane	5500* ppm
75-28-5	isobutane (containing < 0,1 % butadiene (203-450-8), Note K)	5500* ppm
1336-21-6	ammonia 24.5 %	61 ppm
577-11-7	Docusate sodium	5.7 mg/m ³
5989-27-5	(R)-p-mentha-1,8-diene	15 ppm
64-17-5	ethanol	1,800 ppm
99-87-6	p-cymene	120 mg/m ³

· PAC-2:

67-63-0	propan-2-ol	2000* ppm
106-97-8	butane (containing < 0.1% butadiene (203-450-8), Note K)	17000** ppm
74-98-6	propane	17000** ppm
75-28-5	isobutane (containing < 0,1 % butadiene (203-450-8), Note K)	17000** ppm
1336-21-6	ammonia 24.5 %	330 ppm
577-11-7	Docusate sodium	63 mg/m ³
5989-27-5	(R)-p-mentha-1,8-diene	67 ppm
64-17-5	ethanol	3300* ppm
99-87-6	p-cymene	1,300 mg/m ³

· PAC-3:

67-63-0	propan-2-ol	12000** ppm
106-97-8	butane (containing < 0.1% butadiene (203-450-8), Note K)	53000*** ppm
74-98-6	propane	33000*** ppm
75-28-5	isobutane (containing < 0,1 % butadiene (203-450-8), Note K)	53000*** ppm
1336-21-6	ammonia 24.5 %	2,300 ppm
577-11-7	Docusate sodium	380 mg/m ³
5989-27-5	(R)-p-mentha-1,8-diene	170 ppm
64-17-5	ethanol	15000* ppm
99-87-6	p-cymene	1,900 mg/m ³

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7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:**
Do not spray on a naked flame or any incandescent material.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:**
Observe official regulations on storing packagings with pressurized containers.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the remaining constituent has no known exposure limits.

67-63-0 propan-2-ol	
PEL	Long-term value: 980 mg/m ³ , 400 ppm
REL	Short-term value: 1225 mg/m ³ , 500 ppm Long-term value: 980 mg/m ³ , 400 ppm
TLV	Short-term value: 400 ppm Long-term value: 200 ppm BEI, A4
106-97-8 butane (containing < 0.1% butadiene (203-450-8), Note K)	
REL	Long-term value: 1900 mg/m ³ , 800 ppm
TLV	Short-term value: 1000 ppm (EX)
74-98-6 propane	
PEL	Long-term value: 1800 mg/m ³ , 1000 ppm
REL	Long-term value: 1800 mg/m ³ , 1000 ppm
TLV	see Appendix F Minimal oxygen content (D, EX)
75-28-5 isobutane (containing < 0,1 % butadiene (203-450-8), Note K)	
TLV	Short-term value: 1000 ppm (EX)

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· **Ingredients with biological limit values:**

67-63-0 propan-2-ol

BEI	40 mg/L
	Medium: urine
	Time: end of shift at end of workweek
	Parameter: Acetone (background, nonspecific)

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Wash hands before breaks and at the end of work.

General ventilation

· **Breathing equipment:**

Use suitable respiratory protective device in case of insufficient ventilation.

Filter ABEK/P2

· **Protection of hands:**



Protective gloves

Solvent resistant gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.5 mm

· **Penetration time of glove material**

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

Safety glasses



Tightly sealed goggles

· **Body protection:**

Use protective suit.

Full skin covering antistatic, chemical and oil resistant clothing and safety shoes are recommended. (EN1149; EN340&EN ISO 13688; EN13034-6).

· **Limitation and supervision of exposure into the environment**

Use a suitable container to prevent environmental contamination.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Aerosol

Color: Whitish

· **Odor:** Characteristic

· **Odor threshold:** Not determined.

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· pH-value:	Mixture is non-polar/aprotic.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	-44.5 °C (-48.1 °F)
· Flash point:	-97 °C (-142.6 °F)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Upper:	Not determined.
· Vapor pressure:	Not determined.
· Density at 20 °C (68 °F):	0.95 g/cm ³ (7.928 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	14.1 %
Water:	84.0 %
· Solids content:	0.2 %

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

67-63-0 propan-2-ol

Oral	LD50	5840 mg/kg (Rat) (Acute Oral Toxicity)
Dermal	LD50	13900 mg/kg (Rabbit) (Acute Dermal Toxicity)
Inhalative	LC50 (4h)	>25 mg/l (Rat)
	LC50	>25 mg/L (Rat) (Acute Inhalation Toxicity)

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- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

67-63-0	propan-2-ol	3
5989-27-5	(R)-p-mentha-1,8-diene	3
64-17-5	ethanol	1
123-35-3	Myrcene	2B

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

67-63-0 propan-2-ol	
EC50	>100 mg/l (Bacteria)
LOEC (8 days)	1000 mg/l (algae)
LC50 (96h)	9640 mg/l (Pimephales promelas)
LC50 (24h)	9714 mg/l (Daphnia magna)

- **Persistence and degradability** Not easily biodegradable
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

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14 Transport information

· UN-Number · DOT, ADR, ADN, IMDG, IATA	UN1950
· UN proper shipping name · DOT · ADR, ADN · IMDG · IATA	Aerosols, flammable UN1950 AEROSOLS AEROSOLS AEROSOLS, flammable
· Transport hazard class(es) · DOT	
	
· Class · Label	2.1 Gases 2.1
· ADR	
	
· Class · Label	2.5F Gases 2.1
· ADN · ADN/R Class:	2.5F
· IMDG, IATA	
	
· Class · Label	2.1 Gases 2.1
· Packing group · DOT, ADR, IMDG, IATA	Void
· Environmental hazards:	Not applicable.
· Special precautions for user · Hazard identification number (Kemler code): - · EMS Number: · Segregation groups · Stowage Code	Warning: Gases F-D,S-U (SGG18) Alkalis SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.

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· Segregation Code	SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· IMDG	
· Limited quantities (LQ)	IL
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· UN "Model Regulation":	UN 1950 AEROSOLS, 2.1

15 Regulatory information

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

· Sara

· Section 355 (extremely hazardous substances):

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

67-63-0 propan-2-ol

1336-21-6 ammonia 24.5 %

· TSCA (Toxic Substances Control Act):

7732-18-5	Water	ACTIVE
67-63-0	propan-2-ol	ACTIVE
106-97-8	butane (containing < 0.1% butadiene (203-450-8), Note K)	ACTIVE
74-98-6	propane	ACTIVE
75-28-5	isobutane (containing < 0,1 % butadiene (203-450-8), Note K)	ACTIVE
68439-45-2	Alcholethoxylaar	ACTIVE
1336-21-6	ammonia 24.5 %	ACTIVE
577-11-7	Docusate sodium	ACTIVE
68155-07-7	AMIDES, C8-18(EVEN NUMBERED) AND C18-UNSATD., N,N-BIS(HYDROXYETHYL)	ACTIVE

· Hazardous Air Pollutants

None of the ingredients is listed.

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

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US

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/05/2023

Reviewed on 07/05/2023

Trade name: Muc-Off Foam Fresh Cleaner

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· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogeny categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value)**

67-63-0	propan-2-ol	A4
64-17-5	ethanol	A3
80-56-8	alpha-Pinene	A4
13466-78-9	delta-3-Carene	A4

· **MAK (German Maximum Workplace Concentration)**

64-17-5	ethanol	5
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· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **National regulations:**

· **Disturbance regulations:**

Class	Share in %
Wasser	75-<100
NK	10-<25

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Classification according to Regulation (EC) No 1272/2008**

Fysiske og kjemiske egenskaper: Klassifisering er basert på resultatene av blandingene som er testet. Helsefarer, Miljøfarer: Metoden for klassifisering av blandinger basert på blandingens bestanddeler (sumformel).

· **Contact:** info@muc-off.com

· **Date of preparation / last revision** 07/05/2023

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flammable Aerosols 1: Aerosols – Category 1

Gases under Pressure - Liquefied gas: Gases under pressure – Liquefied gas