

Safety Data Sheet dated 1/6/2017, version 2

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

1.1. Product identifier

Part Number: 20032, 20032US

Trade name: Muc-Off B.A.M! Inflate & Repair 125ml

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

Recommended use: repair and inflation Uses advised against:

do not use on humans and animals

1.3. Details of the supplier of the safety data sheet

Muc-Off Ltd 23 Branksome Business Park Branksome Poole, Dorset BH12 1DW UK

1.4. Emergency telephone number

Muc-Off Ltd. +44 (0) 1202 307790

FOR US CHEMTRÉC: 1-800-424-9300 24HR

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

Danger, Aerosols 1, Extremely flammable aerosol. Pressurized container: may burst if heated.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H222+H229 Extremely flammable aerosol. Pressurized container: may burst if heated.

Precautionary statements:

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

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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

P251 Do not pierce or burn, even after use.

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

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments:

None .

A01095/2



2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

section 10.3

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

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

Qty	Name	Ident. Numb	er	Classification
>= 40% - < 50%	GPL	CAS: EC: REACH No.:	68476-40-4 270-681-9 01- 2119486557- 22-XXXX	2.5/C Compr. Gas H280 2.2/1 Flam. Gas 1 H220 DECLK (CLP)*
>= 5% - < 7%	ethanediol; ethylene glycol	Index number: CAS: EC:	603-027-00-1 107-21-1 203-473-3	3.1/4/Oral Acute Tox. 4 H302 3.9/2 STOT RE 2 H373
>= 0.1% - < 0.25%	AMINES,C12- 14(EVEN NUMBERED) ALKYLDIMETHYL,N- OXIDES	CAS:	308062-28-4	3.2/2 Skin Irrit. 2 H315 3.1/4/Oral Acute Tox. 4 H302 4.1/A1 Aquatic Acute 1 H400 4.1/C2 Aquatic Chronic 2 H411 3.3/1 Eye Dam. 1 H318

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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

Section 10.3

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

Treatment:

Follow the doctor's instructions

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

CO2 or Dry chemical fire extinguisher.

Extinguishing media which must not be used for safety reasons:

Water jets.

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 all sources of ignition.

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

store in a cool, well ventilated place, away from heat, flames, sparks or other sources of ignition

keep only in the original container away from sunlight neighborhoods

avoid contact with skin and eyes, inhalation of vapours/mists/dusts.

do not use empty containers before they are cleaned.

contaminated clothing must be replaced before entering the dining areas.

at work do not eat or drink.

do not smoke

avoid the accumulation of electrostatic charges.

Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

swells and repairs tubeless



SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ethanediol; ethylene glycol - CAS: 107-21-1

EU - TWA(8h): 52 mg/m3, 20 ppm - STEL: 104 mg/m3, 40 ppm - Notes: Bold-type: Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational

Exposure [4] (for references see bibliography)

ACGIH - STEL: Ceiling 100 mg/m3 - Notes: A4 (H) - URT and eye irr

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

Do not expose to temperatures exceeding 50° c.

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 and colour:	Spray can		
Odour:	characteristic		
Odour threshold:	Not Relevant		
pH:	10 +/- 1		
Melting point / freezing point:	Not Relevant		
Initial boiling point and boiling range:	Not Relevant		
Flash point:	< 0 ° C aerosol		
Evaporation rate:	Not Relevant		
Solid/gas flammability:	Not Relevant		
Upper/lower flammability or explosive limits:	Not Relevant		
Vapour pressure:	5,5 bar +/- 1		
Vapour density:	>2		
Relative density:	0,650 kg/l +/- 0.05 (20°C)		
Solubility in water: complete			
Solubility in oil: no			
Partition coefficient (n- Not Relevant octanol/water):			



Auto-ignition temperature:	> 200°C	
Decomposition	Not Relevant	
temperature:		
Viscosity:	Not Relevant	
Explosive properties:	sez. 10.3	
Oxidizing properties:	no	

9.2. Other information

Properties	Value	Method:	Notes:
kinematic viscosity:	kv > 2,05 mm2/s (a 40°C)		
Miscibility:	in water		
Fat Solubility:	no		
Conductivity:	Not Relevant		
Substance Groups relevant properties	Not Relevant		

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

may form explosive vapor / air mixtures in places not well ventilated

10.4. Conditions to avoid

keep away from heat, sources of ignition

avoid the accumulation of electrostatic charges.

10.5. Incompatible materials

oxidizing agents

10.6. Hazardous decomposition products

by thermal decomposition can rid COx

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

N.A.

Toxicological information of the main substances found in the product:

GPL - CAS: 68476-40-4

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat > 658 mg/l

ethanediol; ethylene glycol - CAS: 107-21-1

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 7712 mg/kg Test: LD50 - Route: Skin - Species: Mouse > 3500 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 2.5 mg/kg - Duration: 8h

ethanediol; ethylene glycol - CAS: 107-21-1

LD50 (RABBIT) ORAL: 5017 MG/KG BW

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:
- i) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

GPL - CAS: 68476-40-4

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish Negative 19 mg/l - Duration h: 96

Endpoint: LC50 - Species: Daphnia Negative 14.2 mg/l - Duration h: 48 Endpoint: EC50 - Species: Algae Negative 7.7 mg/l - Duration h: 96

ethanediol; ethylene glycol - CAS: 107-21-1

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 72860 mg/l - Duration h: 96 Endpoint: EC50 - Species: Daphnia > 100 mg/l - Duration h: 48 Endpoint: EC50 - Species: Algae 6500-13000 mg/l - Duration h: 96

12.2. Persistence and degradability

None

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

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.

Additional disposal information:

contaminated packaging should be sent for recovery or disposal in compliance with national regulations on waste management

reuse if possible. Product residues are to be considered hazardous waste. disposal must be entrusted to authorised waste management, in compliance with national and, where appropriate, local.

SECTION 14: Transport information

14.1. UN number

ADR-UN number: 1950 IATA-Un number: 1950 IMDG-Un number: 1950

14.2. UN proper shipping name

14.3. Transport hazard class(es)

ADR-Class: 2.5°F CAP. 2.2.2.1.6 UN1950

IATA-Class: 2.1

IMDG-Class: 2 Aerosols UN 1950

A01095/2



14.4. Packing group

14.5. Environmental hazards

Marine pollutant: No

14.6. Special precautions for user

IMDG-Page: 2102

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

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:

None

Where applicable, refer to the following regulatory provisions:

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: P3a

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:

H280 Contains gas under pressure; may explode if heated.

H220 Extremely flammable gas.

H302 Harmful if swallowed.

H373 May cause damage to organs through prolonged or repeated exposure.

H315 Causes skin irritation.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

H318 Causes serious eye damage.

Hazard class and hazard category	Code	Description
Flam. Gas 1	2.2/1	Flammable gas, Category 1
Aerosols 1	2.3/1	Aerosol, Category 1
Compr. Gas	2.5/C	Compressed gas
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Irrit. 2	3.2/2	Skin irritation, Category 2



Eye Dam. 1	3.3/1	Serious eye damage, Category 1
STOT RE 2	3.9/2	Specific target organ toxicity - repeated
		exposure, Category 2
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
Aerosols 1, H222+H229	On basis of test data

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

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 MSDS cancels and replaces any preceding release.

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.

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.