



# Muc-Off Surface Prep Spray

## Safety Data Sheet

According to OSHA HCS 29 CFR 1910.1200

Issue date: 01/04/2020 Revision date: 28/07/2023 Version: 2.0

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

### 1.1. Product identifier

Product form	: Mixture
Product name	: Muc-Off Surface Prep Spray
Product code	: 20971,21084
Type of product	: Biocidal products (e.g. Disinfectants, pest control)
Product group	: End product

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

#### 1.2.1. Relevant identified uses

Main use category	: Consumer use
Use of the substance/mixture	: Bactericide
Function or use category	: Pesticides, non-agricultural (Biocides)

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

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

### 1.4. Emergency telephone number

Emergency number CHEMTREC: 1-800-424-9300 24HR

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to OSHA HCS 2012

Flammable liquids, Category 2	H225
Serious eye damage/eye irritation, Category 2	H319
Full text of H-statements: see section 16	

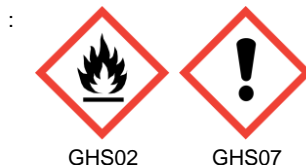
#### Adverse physicochemical, human health and environmental effects

Highly flammable liquid and vapor. Causes serious eye irritation.

### 2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

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Hazard statements (CLP)	: H225 - Highly flammable liquid and vapor. H319 - Causes serious eye irritation.
Precautionary statements (CLP)	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention. P370+P378 - In case of fire: Use alcohol resistant foam, dry extinguishing powder, carbon dioxide (CO <sub>2</sub> ) to extinguish. P403+P235 - Store in a well-ventilated place. Keep cool. P501 - Dispose of contents to a hazardous or special waste collection point.

### 2.3. Other hazards

Contains no PBT/vPvB substances  $\geq 0.1\%$

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

ETHANOL substance with national workplace exposure limit(s)	CAS-No.: 64-17-5 EC-No.: 200-578-6 EC Index-No.: 603-002-00-5 REACH-no: 01-2120102843-65	$\geq 70$	Flam. Liq. 2, H225 Eye Irrit. 2, H319
GLYCERINE substance with national workplace exposure limit(s)	CAS-No.: 56-81-5 EC-No.: 200-289-5 REACH-no: 01-2119471987-18	1 – 5	Not classified

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

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. Take off immediately all contaminated clothing.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after eye contact	: Eye irritation.
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### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

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

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour.  
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. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes.

##### 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. Notify authorities if product enters sewers or public waters.  
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. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes.  
Hygiene measures : 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

Technical measures : Ground/bond container and receiving equipment.  
Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed.

#### 7.3. Specific end use(s)

No additional information available

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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 8.1.1 National occupational exposure and biological limit values

OSHA Permissible Exposure Limit	
Local name	Glycerin
WEL TWA (OEL TWA) [1]	15 mg/m <sup>3</sup> mist
OSHA Permissible Exposure Limit	
Local name	Ethanol
WEL TWA (OEL TWA) [1]	1920 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	1000 ppm

##### 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

###### Appropriate engineering controls:

Ensure good ventilation of the work station.

##### 8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



###### 8.2.2.1. Eye and face protection

###### Eye protection:

Safety glasses

###### 8.2.2.2. Skin protection

###### Skin and body protection:

Wear suitable protective clothing

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### Hand protection:

Protective gloves

### 8.2.2.3. Respiratory protection

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Odour	: alcohol.
Odour threshold	: Not available
Melting point	: < 0 °C
Freezing point	: Not available
Boiling point	: > 35 °C
Flammability	: Highly flammable liquid and vapour.
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: < 23 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: 7
Viscosity, kinematic	: Not available
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 0.86
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Highly flammable liquid and vapour.

### 10.2. Chemical stability

Stable under normal conditions.

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### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

No additional information available

### 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 hazard classes

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

LD50 oral rat	23000 mg/kg
LC50 Inhalation - Rat (Vapours)	> 2.75 mg/l Source: ECHA
LD50 oral rat	10470 mg/kg
LD50 dermal	17100 mg/kg

Skin corrosion/irritation : Not classified  
pH: 7  
Serious eye damage/irritation : Causes serious eye irritation.  
pH: 7  
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

### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.  
Hazardous to the aquatic environment, short-term (acute) : Not classified  
Hazardous to the aquatic environment, long-term (chronic) : Not classified

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LC50 - Fish [1]	54000 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
LC50 - Fish [1]	> 100 mg/l
EC50 - Other aquatic organisms [1]	> 100 mg/l
ErC50 algae	275 mg/l Source: ECHA

### 12.2. Persistence and degradability

Persistence and degradability	Biodegradable.
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### 12.3. Bioaccumulative potential

Partition coefficient n-octanol/water (Log Pow)	-1.75 Source: ECHA
Partition coefficient n-octanol/water (Log Pow)	-0.32 Source: ICSC

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Additional information : Flammable vapours may accumulate in the container.

## SECTION 14: Transport information



In accordance with ADR / IMDG

ADR	IMDG
<b>14.1. UN number or ID number</b>	
UN 1170	UN 1170
<b>14.2. UN proper shipping name</b>	
ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

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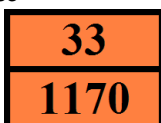
ADR	IMDG
<b>Transport document description</b>	
UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II, (D/E)	UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II
<b>14.3. Transport hazard class(es)</b>	
3	3
	
<b>14.4. Packing group</b>	
II	II
<b>14.5. Environmental hazards</b>	
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No
No supplementary information available	

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR) : F1  
Special provisions (ADR) : 144, 601  
Limited quantities (ADR) : 11  
Excepted quantities (ADR) : E2  
Packing instructions (ADR) : P001, IBC02, R001  
Mixed packing provisions (ADR) : MP19  
Portable tank and bulk container instructions (ADR) : T4  
Portable tank and bulk container special provisions (ADR) : TP1

Tank code (ADR) : LGBF  
Vehicle for tank carriage : FL  
Transport category (ADR) : 2  
Special provisions for carriage - Operation (ADR) : S2, S20  
Hazard identification number (Kemler No.) : 33  
Orange plates :



Tunnel restriction code (ADR) : D/E  
EAC code : •2Y



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### Transport by sea

Special provisions (IMDG)	: 144
Limited quantities (IMDG)	: 1 L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-D
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Colourless, volatile liquids. Pure ETHANOL: flashpoint 13°C c.c. Explosive limits: 3.3% to 19% Miscible with water.

### 14.7. Maritime transport in bulk according to IMO instruments

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

##### REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

##### REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

##### REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

##### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

##### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

##### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

##### Explosives Precursors Regulation (2019/1148)

Contains substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)  
Please see [https://ec.europa.eu/home-affairs/system/files/2021-11/list\\_of\\_competent\\_authorities\\_and\\_national\\_contact\\_points\\_en.pdf](https://ec.europa.eu/home-affairs/system/files/2021-11/list_of_competent_authorities_and_national_contact_points_en.pdf)

##### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

US Toxic Substances Control Act (TSCA) – All components are listed or exempt

Canadian Domestic Substance List (DSL) – All components are listed or exempt

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): Ingredients within this product are not on the Proposition 65 Lists

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
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ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
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ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

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Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.

Safety Data Sheet (SDS),

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.