



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 as amended by Regulation (EU) No. 2020/878, and Regulation (EC) No. 1272/2008

Supersedes date 09-Sep-2016

Revision date 22-Aug-2023

Revision Number 2

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

### 1.1. Product identifier

**Product Code(s)** 251, 664, 664-CTJ, 667, 21018

**Product Name** MUC-OFF NANO TECH MOTORCYCLE CLEANER

**Other means of identification** UFI :PSX1-70CU-600W-R5PR

**Pure substance/mixture** Mixture

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

**Recommended use** Detergent

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

#### **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

**E-mail address** info@muc-off.com

Non-Emergency Telephone Number +44(0)1202 307790

### 1.4. Emergency telephone number

**Emergency Telephone** NHS 111/NHS 24/NHS Direct 111 / 0845 4647 or call a doctor  
**National Emergency Telephone Number**

### **Emergency Telephone - §45 - (EC)1272/2008**

**Europe** 112

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

**Serious eye damage/eye irritation** Category 2 - (H319)

### 2.2. Label elements



**Signal word**  
Warning

#### **Hazard statements**

H319 - Causes serious eye irritation

#### **Precautionary Statements - EU (§28, 1272/2008)**

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear eye protection/ face protection

P337 + P313 - If eye irritation persists: Get medical advice/attention

#### **Unknown aquatic toxicity**

Contains 0 % of components with unknown hazards to the aquatic environment.

#### **2.3. Other hazards**

**PBT and vPvB assessment** The product does not contain any substance(s) classified as PBT or vPvB.

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors.

### **SECTION 3: Composition/information on ingredients**

Not applicable

#### **3.2 Mixtures**

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
TETRASODIUM ETHYLENE DIAMINE TETRAACETATE 64-02-8	0 - 10%	01-211948676 2-27-0000	200-573-9	Acute Tox. 4 (H332) STOT RE 2 (H373) Acute Tox. 4 (H302) Eye Dam. 1 (H318)	-	-	-
ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS 68891-38-3	0 - 10%	01-211948863 9-16-0000	500-234-8	Aquatic Chronic 3 (H412) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)	Eye Irrit. 2 :: 5%<=C<10% Eye Dam. 1 :: C>=10%	-	-

**Full text of H- and EUH-phrases: see section 16****Acute Toxicity Estimate**

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
TETRASODIUM ETHYLENE DIAMINE TETRAACETATE 64-02-8	1658	No data available	No data available	No data available	No data available
ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS 68891-38-3	No data available	2000	No data available	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

**SECTION 4: First aid measures****4.1. Description of first aid measures****Inhalation**

Remove to fresh air. Get medical attention if symptoms occur.

**Eye contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

**Skin contact**

Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.

**Ingestion**

Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.

**Self-protection of the first aider**

Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

May cause redness and tearing of the eyes.

**Eyes**

May cause redness and tearing of the eyes.

**4.3. Indication of any immediate medical attention and special treatment needed****Note to physicians**

Treat symptomatically.

**SECTION 5: Firefighting measures****5.1. Extinguishing media**

<b>Suitable Extinguishing Media</b>	Dry chemical, CO <sub>2</sub> , alcohol-resistant foam or water spray.
<b>Large Fire</b>	CAUTION: Use of water spray when fighting fire may be inefficient.
<b>Unsuitable extinguishing media</b>	Do not scatter spilled material with high pressure water streams.

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

<b>Hazardous combustion products</b>	Carbon oxides. Nitrogen oxides (NOx).
--------------------------------------	---------------------------------------

### **5.3. Advice for firefighters**

<b>Special protective equipment and precautions for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
---	--

## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

<b>Personal precautions</b>	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.
<b>Other information</b>	Refer to protective measures listed in Sections 7 and 8.
<b>For emergency responders</b>	Use personal protection recommended in Section 8.

### **6.2. Environmental precautions**

<b>Environmental precautions</b>	See Section 12 for additional Ecological Information.
----------------------------------	---

### **6.3. Methods and material for containment and cleaning up**

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Flush area with flooding quantities of water. Collect spillage.
<b>Prevention of secondary hazards</b>	Clean contaminated objects and areas thoroughly observing environmental regulations.

### **6.4. Reference to other sections**

<b>Reference to other sections</b>	See section 8 for more information. See section 13 for more information.
------------------------------------	--

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

<b>Advice on safe handling</b>	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.
<b>General hygiene considerations</b>	Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

### **7.2. Conditions for safe storage, including any incompatibilities**

<b>Storage Conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place.
<b>Packaging materials</b>	Keep/store only in original container.

**Storage class (TRGS 510)** Storage class 10.

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

#### **Specific use(s)**

See section 1 for more information.

**Risk Management Methods (RMM)** The information required is contained in this Safety Data Sheet.

## **SECTION 8: Exposure controls/personal protection**

### **8.1. Control parameters**

#### **Exposure Limits**

**Biological occupational exposure limits** This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

#### **Derived No Effect Level (DNEL) - Workers**

Chemical name	Oral	Dermal	Inhalation
TETRASODIUM ETHYLENE DIAMINE TETRAACETATE 64-02-8	-	-	2.5 mg/m <sup>3</sup> [5] [6]
ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS 68891-38-3	-	2750 mg/kg/day [4] [6]	175 mg/m <sup>3</sup> [4] [6]

[4] Systemic health effects.

[5] Local health effects.

[6] Long term.

[7] Short term.

**Derived Minimum Effect Level (DMEL) - Workers** No information available

#### **Notes**

#### **Derived No Effect Level (DNEL) - General Public**

Chemical name	Oral	Dermal	Inhalation
TETRASODIUM ETHYLENE DIAMINE TETRAACETATE 64-02-8	25 mg/kg/day [4] [6]	-	1.5 mg/m <sup>3</sup> [5] [6]
ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS 68891-38-3	15 mg/kg/day [4] [6]	1650 mg/kg/day [4] [6]	52 mg/m <sup>3</sup> [4] [6]

[4] Systemic health effects.

[5] Local health effects.

[6] Long term.

**Derived Minimum Effect Level (DMEL) - General Public** No information available.

**Predicted No Effect Concentration (PNEC)**

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
TETRASODIUM ETHYLENE DIAMINE TETRAACETATE 64-02-8	2.2 mg/l	-	0.22 mg/l	-	-
ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS 68891-38-3	0.24 mg/l	0.071 mg/L	0.024 mg/l	-	-

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
TETRASODIUM ETHYLENE DIAMINE TETRAACETATE 64-02-8	-	-	-	0.72 mg/kg	43 mg/l
ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS 68891-38-3	5.45 mg/kg	0.545 mg/kg	10 g/L	0.946 mg/kg	10000 mg/l

**8.2. Exposure controls****Engineering controls**

No information available.

**Personal protective equipment****Eye/face protection**

Wear safety glasses with side shields (or goggles). Use eye protection according to EN 166.

**Hand protection**

Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Protective gloves. Gloves must conform to standard EN 374.

**Skin and body protection**

Wear suitable protective clothing.

**Respiratory protection**

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations**

Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

**Environmental exposure controls**

No information available.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties****Physical state**

Liquid

**Appearance**

Coloured liquid

Color	pink	
Odor	Characteristic	
Odor threshold	No information available	
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>
Melting point / freezing point		No information available.
Initial boiling point and boiling range		No information available.
Flammability		No information available.
Flammability Limit in Air		No information available.
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point		No information available.
Autoignition temperature		No information available.
Decomposition temperature		No information available.
pH	10.8 - 11.4	
pH (as aqueous solution)		No information available.
Kinematic viscosity		No information available.
Dynamic viscosity		No information available.
Water solubility	Soluble in water	
Solubility(ies)		No information available.
Partition coefficient		No information available.
Vapor pressure		No information available.
Relative density	1.02 @ 20°C	
Bulk density	No information available	
Liquid Density	No information available	
Relative vapor density		No information available.
Particle characteristics		No information available.
Particle Size	No information available	
Particle Size Distribution	No information available	

## 9.2. Other information

9.2.1. Information with regard to physical hazard classes  
Not applicable

9.2.2. Other safety characteristics  
No information available

## **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

Reactivity Stable under recommended storage conditions.

### 10.2. Chemical stability

Stability Stable under normal conditions.

#### Explosion data

Sensitivity to mechanical impact None.  
Sensitivity to static discharge None.

### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

### 10.4. Conditions to avoid

Conditions to avoid Extremes of temperature and direct sunlight.

**10.5. Incompatible materials**

**Incompatible materials** Oxidizing agent.

**10.6. Hazardous decomposition products**

**Hazardous decomposition products** Carbon oxides. Nitrogen oxides (NOx).

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Information on likely routes of exposure****Product Information**

<b>Inhalation</b>	May cause respiratory irritation.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Skin contact</b>	Causes mild skin irritation.
<b>Ingestion</b>	Gastrointestinal discomfort.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** May cause redness and tearing of the eyes. Prolonged contact may cause redness and irritation.

**Acute toxicity****Numerical measures of toxicity**

**The following values are calculated based on chapter 3.1 of the GHS document**

**ATEmix (oral)** 64,765.60 mg/kg

**ATEmix (inhalation-dust/mist)** 58.60 mg/l

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
TETRASODIUM ETHYLENE DIAMINE TETRAACETATE	= 1658 mg/kg ( Rat )	-	-
ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS	-	> 2000 mg/kg ( Rat )	-

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** Classification based on data available for ingredients. Causes mild skin irritation.

**Serious eye damage/eye irritation** Causes serious eye irritation. Causes serious eye irritation.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

## 11.2. Information on other hazards

### **11.2.1. Endocrine disrupting properties**

**Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors.

### **11.2.2. Other information**

**Other adverse effects** No information available.

## **SECTION 12: Ecological information**

### 12.1. Toxicity

**Ecotoxicity** Based on available data, the classification criteria are not met.

**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
TETRASODIUM ETHYLENE DIAMINE TETRAACETATE	-	LC50: =41mg/L (96h, Lepomis macrochirus) LC50: =59.8mg/L (96h, Pimephales promelas)	-	-

### 12.2. Persistence and degradability

**Persistence and degradability** This surfactant complies 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.

### 12.3. Bioaccumulative potential

**Bioaccumulation** No information available.

### **Component Information**

Chemical name	Partition coefficient
ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS	0.3

**12.4. Mobility in soil**

**Mobility in soil** Soluble in water.

**12.5. Results of PBT and vPvB assessment**

**PBT and vPvB assessment** The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
TETRASODIUM ETHYLENE DIAMINE TETRAACETATE	The substance is not PBT / vPvB
ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS	The substance is not PBT / vPvB PBT assessment does not apply

**12.6. Endocrine disrupting properties**

**Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors.

**12.7. Other adverse effects**

No information available.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

**SECTION 14: Transport information****IATA**

14.1 UN number or ID number	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user Special Provisions	None

**IMDG**

14.1 UN number or ID number	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user Special Provisions	None
14.7 Maritime transport in bulk according to IMO instruments	No information available

**RID**

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	

<b>Special Provisions</b>	None
<b>ADR</b>	
14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

## SECTION 15: Regulatory information

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

#### National regulations

Decree n° 2021-1558 du 02/12/21 Modifying the nomenclature of installations  
classified for the protection of the environment 1630

#### Germany

Water hazard class (WGK) slightly hazardous to water (WGK 1)

#### European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

#### Authorizations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).  
This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV).

#### Product restricted per REACH Annex XVII: 3.

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
TETRASODIUM ETHYLENE DIAMINE TETRAACETATE - 64-02-8	75.	-

#### Persistent Organic Pollutants

Not applicable

#### Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

#### International Inventories

TSCA	Contact supplier for inventory compliance status
DSL/NDSL	Contact supplier for inventory compliance status
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status

KECL	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AIIC	Contact supplier for inventory compliance status
NZIoC	Contact supplier for inventory compliance status

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AIIC** - Australian Inventory of Industrial Chemicals  
**NZIoC** - New Zealand Inventory of Chemicals

**15.2. Chemical safety assessment**

**Chemical Safety Report** No information available

**SECTION 16: Other information****Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

H290 - May be corrosive to metals  
 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  
 H332 - Harmful if inhaled  
 H351 - Suspected of causing cancer  
 H373 - May cause damage to organs through prolonged or repeated exposure  
 H412 - Harmful to aquatic life with long lasting effects

**Legend**

SVHC: Substances of Very High Concern for Authorization:

**Legend Section 8: Exposure controls/personal protection**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitizers		

Revision Note \*\*\*Indicates updated data since last publication

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapor	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitization	Calculation method
Skin sensitization	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method

Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)  
 European Chemicals Agency (ECHA) (ECHA\_API)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 National Institute of Technology and Evaluation (NITE)  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
 Organization for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization

**Prepared By** info@muc-off.com  
**Prepared By**

**Supersedes date** 09-Sep-2016

**Revision date** 22-Aug-2023

**Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)****Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**