



SAFETY DATA SHEET NANO TECH BIKE CLEANER

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

1.1. Product identifier

Product name NANO TECH BIKE CLEANER

Product number 904, 904-CTJ, 906, 907

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

Identified uses Detergent.

1.3. Details of the supplier of the safety data sheet

Supplier Muc- Off Ltd
Unit 1, 1st Floor, Innovation
Close, Concept Office Park,
Poole, Dorset
BH12 4QT
+44 (0) 1202 307790
info@muc-off.com

1.4. Emergency telephone number

Emergency telephone +44 (0) 1202 307790 (Office Hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC/1272/2008)

Physical hazards Not Classified

Health hazards Eye Irrit. 2 - H319

Environmental hazards Not Classified

Classification (67/548/EEC or 1999/45/EC) Xi; R36

2.2. Label elements

Pictogram



Signal word Warning

Hazard statements H319 Causes serious eye irritation.

NANO TECH BIKE CLEANER

Precautionary statements P264 Wash contaminated skin thoroughly after handling.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE 1-5%		
CAS number: 64-02-8	EC number: 200-573-9	REACH registration number: 01-2119486762-27-XXXX
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H332 Eye Dam. 1 - H318 STOT RE 2 - H373	Classification (67/548/EEC or 1999/45/EC) Xn;R22 Xi;R41	
ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS 1-5%		
CAS number: 68891-38-3	EC number: 500-234-8	REACH registration number: 01-2119488639-16
Classification Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Aquatic Chronic 3 - H412	Classification (67/548/EEC or 1999/45/EC) Xi; R38, R41	
GLYCERINE > 1		
CAS number: 56-81-5	EC number: 200-289-5	REACH registration number: 01-2119471987-18-XXXX
Classification Not Classified	Classification (67/548/EEC or 1999/45/EC)	
TRISODIUM NITRILOTRIACETATE <1%		
CAS number: 5064-31-3	EC number: 225-768-6	
Classification Acute Tox. 4 - H302 Eye Irrit. 2 - H319 Carc. 2 - H351	Classification (67/548/EEC or 1999/45/EC) Carc. Cat. 3;R40 Xn;R22 Xi;R36	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition comments The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

NANO TECH BIKE CLEANER

General information	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Never give anything by mouth to an unconscious person. Get medical attention if any discomfort continues.
Inhalation	Remove affected person from source of contamination. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any discomfort continues.
Skin contact	Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if any discomfort continues.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

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

Ingestion	May cause stomach pain or vomiting.
Eye contact	Causes serious eye irritation.

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

Notes for the doctor	Treat symptomatically.
-----------------------------	------------------------

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Do not use water jet as an extinguisher, as this will spread the fire.
-------------------------------------	---

5.2. Special hazards arising from the substance or mixture

Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up.
Hazardous combustion products	Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Nitrous gases (NO _x).

5.3. Advice for firefighters

Protective actions during firefighting	Containers close to fire should be removed or cooled with water.
---	--

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. In case of spills, beware of slippery floors and surfaces.
-----------------------------	--

6.2. Environmental precautions

Environmental precautions	Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.
----------------------------------	--

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.
--------------------------------	--

NANO TECH BIKE CLEANER

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep container tightly closed. Keep only in the original container.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

GLYCERINE

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ mist

WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE (CAS: 64-02-8)

DNEL Workers - Inhalation; Short term local effects: 2.5 mg/m³
 Workers - Inhalation; Long term local effects: 2.5 mg/m³
 Consumer - Inhalation; Short term local effects: 1.5 mg/m³
 Consumer - Inhalation; Long term local effects: 1.5 mg/m³
 Consumer - Oral; Long term systemic effects: 25 mg/kg/day

PNEC - Fresh water; 2.2 mg/l
 - Marine water; 0.22 mg/l
 - Intermittent release; 1.2 mg/l
 - Soil; 0.72 mg/kg
 - STP; 43 mg/l

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS (CAS: 68891-38-3)

DNEL Industry - Dermal; Long term systemic effects: 2750 mg/kg/day
 Industry - Inhalation; Long term systemic effects: 175 mg/m³
 Consumer - Dermal; Long term systemic effects: 1650 mg/kg/day
 Consumer - Oral; Long term systemic effects: 15 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 52 mg/m³

PNEC - Fresh water; 0.24 mg/l
 - Soil; 0.946 mg/kg
 - STP; 10000 mg/l
 - Marine water; 0.024 mg/l
 - Intermittent release; 0.071 mg/l
 - Sediment (Freshwater); 5.45 mg/kg
 - Sediment (Marinewater); 0.545 mg/kg

GLYCERINE (CAS: 56-81-5)

NANO TECH BIKE CLEANER

Ingredient comments	WEL = Workplace Exposure Limits
DNEL	Industry - Inhalation; Long term local effects: 56 mg/m ³
PNEC	<ul style="list-style-type: none"> - Fresh water; 0.885 mg/l - Marine water; 0.0885 mg/l - Intermittent release; 8.85 mg/l - STP; 1000 mg/l - Soil; 0.141 mg/kg - Sediment (Freshwater); 3.3 mg/kg - Sediment (Marinewater); 0.33 mg/kg

8.2. Exposure controls

Protective equipment



Eye/face protection

The following protection should be worn: Chemical splash goggles.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Neoprene. EN 374

Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Coloured liquid.
Colour	Pink.
Odour	Characteristic.
Odour threshold	No information available.
pH	pH (concentrated solution): 10.8 - 11.4
Melting point	No information available.
Initial boiling point and range	No information available.
Flash point	No information available.
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	1.02 @ 20°C
Solubility(ies)	Soluble in water.

NANO TECH BIKE CLEANER

Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	No information available.
Explosive properties	No information available.
Oxidising properties	No information available.

9.2. Other information

Other information	Not determined.
--------------------------	-----------------

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
-------------------	---

10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
------------------	---

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not determined.
---	-----------------

10.4. Conditions to avoid

Conditions to avoid	Avoid excessive heat for prolonged periods of time.
----------------------------	---

10.5. Incompatible materials

Materials to avoid	Strong oxidising agents.
---------------------------	--------------------------

10.6. Hazardous decomposition products

Hazardous decomposition products	Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Nitrous gases (NO _x).
---	--

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects	No information available.
------------------------------	---------------------------

Acute toxicity - oral

ATE oral (mg/kg)	69,531.25
-------------------------	-----------

Acute toxicity - dermal

Notes (dermal LD₅₀)	No information available.
---------------------------------------	---------------------------

Acute toxicity - inhalation

ATE inhalation (gases ppm)	175,781.25
-----------------------------------	------------

ATE inhalation (vapours mg/l)	429.69
--------------------------------------	--------

ATE inhalation (dusts/mists mg/l)	58.59
--	-------

Skin corrosion/irritation

Animal data	No information available.
--------------------	---------------------------

Serious eye damage/irritation

NANO TECH BIKE CLEANER

Serious eye damage/irritation Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation No information available.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion Gastrointestinal symptoms, including upset stomach.

Skin contact Prolonged and frequent contact may cause redness and irritation.

Eye contact Causes serious eye irritation.

SECTION 12: Ecological Information

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Toxicity No data available.

12.2. Persistence and degradability

Persistence and degradability The surfactant(s) contained in this product 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.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available.

Partition coefficient No information available.

12.4. Mobility in soil

Mobility The product is soluble in water.

12.5. Results of PBT and vPvB assessment

NANO TECH BIKE CLEANER

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information This material and its container must be disposed of as hazardous waste. Do not puncture or incinerate, even when empty.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

Not applicable.

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

National regulations The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

NANO TECH BIKE CLEANER

EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
 Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
 COMMISSION REGULATION (EU) 2015/830 of 28 May 2015.

Guidance

CHIP for everyone HSG228.
 Approved Classification and Labelling Guide (Sixth edition) L131.
 Safety Data Sheets for Substances and Preparations.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 CAS: Chemical Abstracts Service.
 DNEL: Derived No Effect Level.
 IATA: International Air Transport Association.
 IMDG: International Maritime Dangerous Goods.
 Kow: Octanol-water partition coefficient.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PBT: Persistent, Bioaccumulative and Toxic substance.
 PNEC: Predicted No Effect Concentration.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 vPvB: Very Persistent and Very Bioaccumulative.
 IARC: International Agency for Research on Cancer.
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 cATpE: Converted Acute Toxicity Point Estimate.
 BCF: Bioconcentration Factor.
 BOD: Biochemical Oxygen Demand.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 NOAEC: No Observed Adverse Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 NOEC: No Observed Effect Concentration.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

NANO TECH BIKE CLEANER

Revision date	09/09/2016
Revision	05
Supersedes date	01/07/2015
Version number	1.001
SDS status	Approved.
Signature	Muc-Off
Risk phrases in full	R20/22 Harmful by inhalation and if swallowed. R22 Harmful if swallowed. R36 Irritating to eyes. R38 Irritating to skin. R40 Limited evidence of a carcinogenic effect. R41 Risk of serious damage to eyes.
Hazard statements in full	H302 Harmful if swallowed. 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.