




MATERIAL SAFETY DATA SHEET

(in accordance with CE 1907/2006 – REACH)

1. Identification of the substance/preparation and of the company	
1.1 Product name:	OFF ROAD CHAIN
1.2 Relevant identified uses of the substance or mixture: Uses advises against:	Chain lubricant in spray All except above indicated
1.3 Manufacturer/Supplier:	Nils S.p.A. Via Stazione, 30 39014 Postal (BZ) ITALY Tel. +39 0473 29 24 00 Fax: +39 0473 29 12 44
Reference to safety data sheet:	e-mail: nils@nils.it www.nils.eu
1.4 Emergency telephone number:	Tel +39 0473 292400 schedasicurezza@nils.it Nils S.p.A:+39 0473 29 24 00 (only available during office hours) Centro Antiveleni Ospedale Niguarda Milano: +39 02 66101029
2. Hazards identification	
2.1 Class. Accord. to CE 1272/2008:	Hazard categories: Aerosol: Aerosol 1 Hazard Statements: Extremely flammable aerosol. Pressurised container: May burst if heated.
2.2 Label elements CE 1272/2008: Pictograms:	 GHS02
Signal word:	Signal word: Danger
Hazard statements H:	H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated.
Precautionary statements P:	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.
2.3 Other hazards :	In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

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3. Composition/information on ingredients

3.2 Mixtures

Dangerous components:

Nr. CE	Nr. CAS	Nr. Reach	Description	%	Class. 1272/08
204-065-8	115-10-6	01-2119472128-37	dimethyl ether	55-<60	Flam. Gas 1, Liquefied gas; H220 H280

Additional information:

Complete list H hazard statements is indicated in point 16 of this MSDS.

4. First aid measures

4.1 General information:

In case of accident or if you feel unwell, seek medical advice immediately (if possible show the label of this product).

- after inhalation:

Provide fresh air. In case of respiratory tract irritation, consult a doctor (if possible show the label of this product).

- after skin contact:

In case of skin contact wash with plenty of soap and water. Remove contaminated clothing and laundry before reuse. If skin irritation occurs, consult a doctor.

- after eye contact:

Rinse opened eye for 10-15 minutes under running water, consult a doctor

- after swallowing:

Observe risk of aspiration if vomiting occurs. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

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

No information available.

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

Treat symptomatically.

5. Fire fighting measures

5.1 Extinguishing media:

Suitable extinguishing media:

Carbon dioxide (CO₂), foam, extinguishing powder.

Unsuitable extinguishing media:

Water

5.2 Special hazards arising from the substance or mixture:

Flammable. Vapours can form explosive mixtures with air.

5.3 Advice for firefighters:

In case of fire: Wear protective and chemicals resistant protective gear. Wear self-contained breathing apparatus.

5.4 Additional information:

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:	Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.
6.2 Environmental precautions:	Do not allow uncontrolled discharge of product into the environment. Danger of explosion.
6.3 Methods and material for containment and cleaning up:	Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.
6.4 Reference to other sections:	Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

7. Handling and storage

7.1 Precautions for safe handling:	Do not pierce or burn, even after use. If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.
Information about protection against explosions and fires:	Do not spray on naked flames or any incandescent material. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharge. Vapours can form explosive mixtures with air.
7.2 Conditions for safe storage, including any incompatibilities:	Keep container tightly closed. Store locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations. Keep in a cool, well-ventilated place. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.
7.3 Specific end use(s):	Observe technical data sheet.

8. Exposure controls and personal protection

8.1 Control parameters:	TWA (8h): Exposure limit values		
Exposure limits:	CAS	ppm	mg/m ³
	Dimethyl ether, 115-10-6	1000	1900
Exposure controls			
-Personal protective equipment:	If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.		
-General protective and hygiene measures:	Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.		
-Respiratory protection:	In case of inadequate ventilation wear respiratory protection. Suitable respiratory protection apparatus: Combination filtering device (EN 14387) A-P2		

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-Hand protection:	When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Suitable material: NBR (Nitrile rubber), Thickness of the glove material: 0,4 mm, Breakthrough time (maximum wearing time): >480 min
-Eye protection:	Wear eye/face protection. Suitable eye protection: goggles, Eye glasses with side protection
-Body protection:	Wear anti-static footwear and clothing

9. Physical and chemical properties

Form: Colour: Odour:	Aerosol Light yellow Characteristic		
	Value	Unit	Method
pH value:	Not applicable		
Melting point:	not determined		
Boiling point/Boiling range:	<-20	°C	
Flash point:	<-20	°C	
Flammability:			
Solid:	Not applicable		
Gas:	Not applicable		
Explosion limits: lower limit:	3.3	% vol	
Explosion limits: upper limit:	26.2	% vol	
Ignition temperature:	235	°C	
Oxidizing properties:	Not oxidizing		
Vapour pressure:	Not determined		
Density at 20°C:	0.753	g/cm ³	calculated
Solubility in water:	insoluble		
Solubility in other solvents:	Not determined		
Partition coefficient:	Not determined		
Viscosity / dynamic:	Not determined		
Vapor density:	Not determined		
Evaporation rate:	Not determined		

10. Stability and reactivity

10.1 Reactivity:	Flammable, Ignition hazard
10.2 Chemical stability:	The product is stable under storage at normal ambient temperatures.
10.3 Possibility of hazardous reactions:	No known hazardous reactions.
10.4 Conditions to avoid:	Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.
10.5 Incompatible materials:	No information available.
10.6 Hazardous decomposition products:	Gasses / vapours, toxic

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11. Toxicological information

11.1 Information on toxicological effects:

Acute toxicity:

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

Irritation and corrosivity:

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

Sensitising effects:

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

STOT-single exposure:

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

Severe effects after repeated or prolonged exposure:

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

Carcinogenic/mutagenic/toxic effects for reproduction:

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

Aspiration hazard:

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

Additional information on tests:

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

12. Ecological information

12.1 Toxicity:

The product is not: Ecotoxic.

12.2 Persistence and degradability:

The product has not been tested.

12.3 Bioaccumulative potential:

The product has not been tested.

Partition coefficient n-octanol/water:

CAS	Product	Log Pow
115-10-6	dimethyl ether	0.07

12.4 Mobility in soil:

The product has not been tested.

12.5 Results of PBT and vPvB assessment:

The product has not been tested.

12.6 Other adverse effects:

No information available.

Further information:

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

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13. Disposal considerations	
13.1 Waste treatment methods -Waste key: -Contaminated packaging:	Do not allow to enter into surface water or drains. Dispose of waste according to applicable local legislation. 16 05 04 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing dangerous substances. Classified as hazardous waste. Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.
14. Transport information	
Land transport (ADR/RID) 14.1. UN number: UN 1950 14.2. UN proper shipping name: AEROSOLS 14.3. Transport hazard class(es): 2 Hazard label: 2.1 Classification code: 5F Special Provisions: 190 327 344 625 Limited quantity: 1 L Transport category: 2 Tunnel restriction code: D Other applicable information (land transport): E0 Inland waterways transport (ADN) 14.1. UN number: UN 1950 14.2. UN proper shipping name: AEROSOLS 14.3. Transport hazard class(es): 2 Hazard label: 2.1 Classification code: 5F Special Provisions: 190 327 344 625 Limited quantity: 1 L Other applicable information (inland waterways transport): E0 Marine transport (IMDG) 14.1. UN number: UN 1950 14.2. UN proper shipping name: AEROSOLS 14.3. Transport hazard class(es): 2.1 14.4. Packing group: - Hazard label: 2.1 Special Provisions: 63, 190, 277, 327, 344, 959 Limited quantity: 1000 ml EmS: F-D, S-U Other applicable information (marine transport): E0 Air transport (ICAO) 14.1. UN number: UN 1950 14.2. UN proper shipping name: AEROSOLS, flammable 14.3. Transport hazard class(es): 2.1 Hazard label: 2.1 Special Provisions: A145 A167 A802 Limited quantity Passenger: 30 kg G IATA-packing instructions - Passenger: 203 IATA-max. quantity - Passenger: 75 kg IATA-packing instructions - Cargo: 203 IATA-max. quantity - Cargo: 150 kg Other applicable information (air transport) : E0 Y203 14.5 Environmental hazards: ENVIRONMENTALLY HAZARDOUS: no 14.6 Special precautions for users: Warning: Flammable gases. 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable	

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15. Regulations

<p>15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture</p> <p>1999/13/CE (VOC):</p> <p>More information:</p> <p>Employment restrictions:</p> <p>Water hazard class (German reg.):</p> <p>15.2 Chemical safety assessment</p>	<p>Reg. CE 1272/2008 (CLP) Reg. CE 790/2009 (1° ATP CLP) Reg. 1907/2006 (Reach) Reg. UE 453/2010</p> <p>59,494 % (447,99 g/l)</p> <p>To be observed: 850/2004/EC, 79/117/EEC, 689/2008/EC, 2008/47/EC</p> <p>Observe employment restrictions for young people.</p> <p>WGK 2 (hazardous for water).</p> <p>Chemical safety assessments for substances in this mixture were not carried out.</p>
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16. Other information

This MSDS was prepared in accordance to REACH 1907/2006/EC.

Relevant H hazard statements in point 3:

H hazard statements:

H220 Extremely flammable gas.

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

H280 Contains gas under pressure; may explode if heated.

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.

Reviewed on: 09.03.2016