Safety Data Sheet

This version supersedes all previous versions. Published 22nd[nd] March 2019
This SDS has been created in compliance with CLP Regulation (EC) No 1272/2008 in accordance with Globally Harmonized System of Classification and Labelling of Chemicals (GHS) and REACH EC No 1907/2006.

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

1.1 Product identifier

Green Oil Dry Chain Wax
(Previously called White Super Dry Chain Wax)

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

Use Green Oil Dry Chain Wax for lubricating bicycle chains for dusty conditions, and a clean looking lubricated chain
To be applied to chain, left to dry for 2 minutes.
Dries to leave a wax-oil film on the bicycle chain

1.3 Details of the Supplier of the Safety Data Sheet

Green Oil UK Ltd,
Unit S7
The Old Granary
245 Coldharbour Lane
Brixton
London
SW9 8RR
United Kingdom
For all safety data sheet enquiries email MSDS@GreenOil.cc
+44 (0)20 7274 8725
Office hours: 0900 - 1800 GMT, excluding holidays and weekends.

International Distributors / Suppliers:

Australia: EuroCycles, Unit 21, 2 Chaplin Drive, Lane Cove NSW 2066 Australia. +61 2 9420 9480. info@euro-cycles.com.au
Belgien: Technolyt, Way Group, Industrieweg 35, 1521 NE Wormerveer,Netherland +31 (0) 75 647 45 45. info@technolyt.nl.
Ceská Republika: TL Sport UK Ltd, 66 Dunnock close, London, N9 8UD, +447785944206 info@TLsportuk.com.
Danmark: X-Bike.dk, Mike Froberg, Ditzelsvej 5, 8450 Hammel, Denmark 52704300 info@x-bike.dk.
Deutchland: ESBT GmbH, Marktplatz 3, 88316 Isny i. A, 88316 Isny Deutschland. info@esbt.one. +49 (0)7562 981 35 39.
España: Cultbikes Racing S.L, PG STA. Maria Park C. Maeresma No.2, 08460, STA. Maria De Palautordera, Barcelona. 607 03 49 13. Info@CultbikeRacing.com.
Republic of Korea: RPM Sports, (Wooyi-dong 1,2) 9, Samyang-ro 159ga-gil, Gangbuk-gu, Seoul, 01005, Republic of Korea. Tel: +82-2-905-0377
Latvija: Gandrs, Kalnciema str, 28, Riga, LV - 1046. gandrs@gandrs.lv. + 371 67 614 775.
Luxembourg: Technolyt, Way Group, Industrieweg 35, 1521 NE Wormerveer,Netherland +31 (0) 75 647 45 45. info@technolyt.nl.
Magyarország: Bike Planet, Hungary, BIKE PLANET KFT, 1211 Budapest, Központi út 21-33. Tel/Fax: +36-1-276-2199. info@bikeplanet.hu.
Netherlands: Technolyt, Way Group, Industrieweg 35, 1521 NE Wormerveer,Netherland +31 (0) 75 647 45 45. info@technolyt.nl.
Norge: Sykkelkomponenter, Østre Tveit, 5647 Baldersheim, Norway. 48 23 92 1. info@sykkelkomponenter.no
Россия: Bike Russia: 197198, Sankt-Petersburg, B. Pushkarckaia 20, Russia. OPT@Bike-Russia.Ru. +7 812 449-07-65.
Polska: 7Anna, sp. z o.o. sp. k, ul. Raciborskiego 123, 80-215 Gdańsk, NIP 957-104-26-05, Regon 221084187. Tel: 58 520 18 04 info@7anna.com.pl. Portugal:
Portugal: Outside Sports Comércio de Artigos Desportivos, Lda,Rua António Leal da Ascensão 18 A /, Torres Vedras, Portugal. sales@OutsideSports.pt.
România: Black Market Bikes: mun. Oradea, str. Aluminei, nr 24, bl. PC 82, ap. 1, jud: Bihor. info@Black-Market.ro. 40746527869
Singapore: Little Bike Shop, 218 Loyang Avenue #01-04, 509066, Singapore. +65 9848 4090. contact@stridersingapore.com
South Africa: Cutting Edge Marketing cc, PO Box 1965, Faerie Glen, 0043. info@cuttingedgesa.co.za. 0825 633 698
Switzerland: Indian Summer Ltd, Seestrasse 321B, 8804 Au ZH, Switzerland. mail@indiansumer.ch. 43 499 03 43.
Singapore: YB SPORTS CO Ltd. bb5rg@naver.com. 82 2 6401 9770.
Suomi: Power Factory, Uimonen Trading OY, Kaskimäenkatu 7, 33900 Tampere, Finland, info@uimonen.fi. 03-2656 700
Taiwan: Frontier Sport, 1F, NO17, Lane120, Neihu Rd, Neihu District, Taipei, Taiwan, ROC 11493 Phone: 886-2-27999168. info@frontier-sport.com.
New Zealand: Bikes International, 38 Airpark Dr, Mangere 2022, Auckland, New Zealand. +64 9 267 1245. Info@bikesinternational.co.nz
United States of America: Zeitbike LLC, 298 Dalton Street, Ventura CA 93003. 312.375.3275. Info@Zeitbike.com. (National Poison Line: 1-800-222-1222)
United Kingdom: i-ride (The Martlet Group Ltd), 7-8B Mid Sussex Business Park, Ditchling Common Ind. Est, Folders Lane East, Ditchling, Sussex, BN6 8SE United Kingdom. 01444 243 00. info@i-ride.co.uk.
And Green Oil UK Ltd, Unit S7, The Old Granary, 245 Coldharbour Lane, SW9 8RR, United Kingdom. 020 7274 8725. info@greenoil.cc. Office hours: 0900: 1800 weekdays.

1.4 Emergency Telephone number

Green Oil UK Ltd: +44 (0)20 7274 8725
(Open weekdays 10:00-18:00)

Austria
T: 1 515 61-0
Balarus:
T: (17) 212-76-21
Belgium:
T: +070 245 245
Coatia:
T: 12348342
F: 14673303
Czech Republic:
T: 224 91 92 93
T: 224 91 54 02
Denmark:
T: 82 12 12 12
Estonia:
T: 16662
T: 7943 794
Finland:
T: 0800 147 111 (free)
T: 09 471 977 (normal rate call)
France:
Angers: 02 41 48 21 21
Bordeaux: 05 56 96 40 80
Lille: 0800 59 59 59
Lyon: 04 72 11 69 11
Marseille: 04 91 75 25 25
Nancy: 03 83 22 50 50
Paris: 01 40 05 48 48
Strasbourg: 03 88 37 37 37
Toulouse: 05 61 77 74 47
FYROM (Republic of North Macedonia)
T: 02/3147635
Germany
Berlin: 03019240
Bonn: 0228/19240
Erfurt: 0361/730 730
Freiburg: 0761/19240
Göttingen: 0551/19240
Homburg: 06841/19240
Mainz: 06131/19240
Munich: 089/19240
Greece:
T: 2107793777
F: 00302107486114
Hungary:
T: (+ 36-80) 201-199
T: (+ 36-1) 476-6464
Iceland:
T: 543 2222
T: 543 1000
T: 112
Republic of Ireland:
T: 01809 2566
T: 01809 2166

Italy:
BERGAMO: 800 88.33.00
FLORENCE: 055 79.47.819
FOGGIA: 0881 732326
GENOVA: 010 35.28.08
MILANO: 02 66.10.10.29
NAPOLI: 081 74.72.870
PAVIA: 0382 24.444
ROME: 06 30.54.343 / 06 49.97.80.00
Rome Pediatric Hospital Bambino Gesù: 06 6859.3726

Lithuania: 112

Netherlands: 112 for emergencies. www.vergiftigingen.info
(030-274-8888 for medical professionals only)

Norway: 22 59 13 00

Poland:
Krajow: T (12) 411 99 99. F: (12) 424 83 56
Gdansk:T: (58) 682 04 04

Portugal:
T: 808 250 143

Russia:
T: +7 (495) 928 16 87 (or 103)
F: +7 (495) 921 68 85

Slovakia:
T: +421 2 5477 4166

Slovenia:
T: 112

Spain:
T: 91 562 04 20

Sweden:
T: 010-456 6700 or 112

Switzerland:
T: 145

Turkey:
T: 112

United Kingdom:
England: 111
Wales: 111
Scotland: 111
In N Ireland: Contact local GP (find out of hours GP at (www.gpoutofhours.hscni.net/
Republic of Ireland: 01 809 2166

Australia:
T: 13 11 26

Canada:
Quebec: 1-800-463-5060
Ontario: 1-800-268-9017

Jamaica and greater Caribbean:
T: 1-888-764-7667
T: 927-1680 ext 2300
Emergencies: (876) 927-1620-8 ext 2500

USA: 1-800-222-1222

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

H225	Highly flammable liquid and vapour

2.2 Label elements

Signal word:

Danger

Hazard Statements:

H225	Highly flammable liquid and vapour
H320	Causes skin and eye irritation

Prevention:

P101	If medical advice is needed, have product container or label to hand.
P102	Keep out of reach of children
P103	Read label before use
P210	Keep away from sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed
P270	Do not eat, drink or smoke when using this product
P370 + P378	In case of fire: Use foam or CO_2 to extinguish

Response:

P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P370 + P378	In case of fire: Use foam or CO_2 to extinguish

Disposal:

P501	Dispose of contents to compost bin or suitable waste disposal facility. Dispose of bottle to HDPE recycling bank and cap to PP recycling bank if possible

2.3 Other hazards

None

SECTION 3: Composition / information on ingredients

3.2 Mixtures

Non hazardous ingredients

CAS number	Name	Classification according to Regulation (EC) No 1278/2008 (CLP).
8002-13-9	Rapeseed Oil	Not hazardous
8006-40-4	Bees wax	Not hazardous
84604-14-8	Specialised rosemary extract	Not hazardous

Hazardous ingredients

Contains bioethanol from EU grown sugar.

CAS number	REACH Registration number where available	% Weight	Name	Classification according to Regulation (EC) No 1278/2008 (CLP).
64-17-5	01-2120063206-63	>50%	Bioethanol	H225 Flammable liquid and vapour
78-93-3	Exempt	<1%	Methyl ethyl ketone	H224 Highly flammable liquid and vapour. H320 Causes skin and eye irritation.
3734-33-6	223-095-2	<20ppm	Denatonium benzoate	H302 Harmful if swallowed. H315 Causes skin irritation H319 Causes serious eye irritation. H335 May cause respiratory irritation.

SECTION 4: First Aid Measures

4.1 Description of first aid measures

General notes

Following inhalation: Seek medical attention if fluid is inhaled. No medical attention necessary if just vapour from fluid is inhaled. However, if headache, nausea or drowsiness occurs, go to fresh air.

Following skin contact: Wash with soap and water.

Following eye contact: Rinse eye with slow flowing cool water for 1 minute, or with eye wash according to eye wash instructions.
If skin rash or eye irritation persist, get medical attention and show them product packaging.

Following ingestion: Do not induce vomiting.
Drink water or alkaline drink to dilute. Avoid driving due to the alcohol affect of this product. Consult doctor or poison centre if consumed by a child.

Self-protection of the first aider: Take normal, reasonable precautions.

Precautionary phrases

P101	If medical advice is needed, have product container or label to hand.
P102	Keep out of reach of children
P103	Read label before use
P233	Keep container tightly closed
P270	Do not eat, drink or smoke when using this product
P370 + P378	In case of fire: Use foam or CO_2 to extinguish
P501	Dispose of contents to compost bin or suitable waste disposal facility. Dispose of bottle to HDPE recycling bank and cap to PP recycling bank if possible
EUH066	Repeated exposure may cause skin dryness or cracking
H320	Causes eye irritation

4.2 Most important symptoms and effects, both acute and delayed

The affect of consuming this product is similar to that of consuming alcohol in vast quantities. It is not recommended.

May cause liver damage.

4.3 Indication of any immediate medical attention and special treatment needed

See section 4.1 above.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Use foam or CO_2 to extinguish.

Water is not recommended as this product is a fluid, and a fluid on fire can splash when water is used with hazardous consequences.

5.2 Special hazards arising from the substance or mixture

Splashing effect from use of water to extinguish fire – water should not be used unless Green Oil Dry Chain Wax is on spread very thinly and water extinguishing method aimed far away from people or animals who might be struck by splashing fire.

Foam and CO_2 are the preferred extinguishing medium.

5.3 Advice for fire-fighters

Product is fully biodegradable

Product will usually evaporate from hard surfaces or soil before entering water ways. In waterways product will biodegrade.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear latex, or neoprene gloves when using.

For non-emergency personnel
Protective gloves should be worn whilst clearing up the spill.
Remove sources of ignition – for example a gas fire or lit cigarettes. Also open windows for ventilation if spilled in large quantities indoors.

For emergency responders
No special precautions required

6.2 Environmental precautions

If spilt in vast quantities, use sand or soil to absorb.
If 100 meters from river in soil, product will evaporate or absorb into soil then evaporate and will not reach waterway
Biodegradable and not environmentally hazardous in normal use.

6.3: Methods and material for containment and cleaning up

6.3.1 For containment:

Generally a consumer may spill up to 100ml from a single bottle.
This advice is only relevant if a large number of bottles are damaged, and a vast quantity of product spilled:

Bunding, soil or sand may be used to contain a spill.

6.3.2 For cleaning up:

Neutralising techniques: Use water, sand or soil
Decontamination techniques: Use soap and water to remove from skin.
Use water to wash away from roads.
Absorbent materials: sand or soil

Product will evaporate within 24 hours in most circumstances.

6.3.3 For cleaning up:

Product should not be sucked up with a vacuum cleaner, unless dry and mixed with sand.
Clothing should be washed with normal washing powder after contamination.

6.4 Reference to other sections

See section 13 for packaging recycling and waste handling information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Wear latex, or neoprene gloves when using.
Avoid pouring directly into rivers. Avoid contact with sparks and flames.
Avoid contact with oxidizing agents, and (strong) acids.

7.1.2 Advice on general occupational hygiene:

Do not smoke whilst using this product.
Store with lid tightly secured.
Keep away from: Heat sources, ignition sources, oxidizing agents, (strong) acids
Specific end uses: See instructions on bottle and section 1.2.

7.2 Conditions for safe storage, including any incompatibilities

Store out of the reach of children
Keep container tightly closed
Store away from heat, open flames sparks, and other ignition sources.
Store away from, ignition sources, oxidizing agents, (strong) acids.

7.3 Specific end uses

Dry Chain Wax for lubrication of bicycle chains brake and gear cables.

SECTION 8: Exposure controls/ personal protection

8.1 Control parameters

8.1.1 National exposure limits for hazardous substances within the mixture:

Substance: Bio-Ethanol **CAS: 64-17-5**					
	Limit value- Eight hours		**Limit value – short term**		
Country	**ppm**	**Mg/ m3**	**ppm**	**Mg/m3**	**Legal basis**
Australia	1000	1880	None	None	Set by Safe Work Australia
Austria	1000	1900	2000	3800	Set by the OEL Regulation "Grenzwerteverordnung"
Belgium	1000	1907	None	None	**VLEP/GWBB**
Canada – Ontario	Not available	Not available	1000	Not available	Based on Qubec VEA laws
Canada – Québec	1000	1880	Not available	Not available	Set by Quebec Commission for Occupational Health and Safety (Commission de la santé et de la sécurité du travail – CSST)
Denmark	1000	1000	2000	3800	Danish law
Finland	1000	1900	1300 (1)	2500 (1)	Finish law
France	1000	1900	5000	9500	French Labour Ministry
Germany (AGS)	500	960	1000 (1)	1920(1)	German Committee on Hazardous Substances Ausschuss für Gefahrstoffe (AGS)
Germany (DFG)	500	960	1000 (1)	1920 (1)	DFG Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Arear (MAK Commission)
Hungary	Not available	1900	Not available	7600	Set byHungarian Institute of Occupational Health (HIOH – OMFI; department of the NFSZ – Nemzeti Foglalkoztatási Szolgálat (Nemzeti Munkaügyi Hivatal)) And largely based on EU limits
Ireland	Not available	Not available	1000	Not available	Based on UK Law
Latvia	Not available	1000	Not available	Not available	Latvian law
New Zealand	1000	1880	Not available	Not available	Based on New Zealand law
Poland	Not available	1900	Not available	Not available	Set by the Interdepartmental Commission for Maximum Admissible Concentrations and Intensities for Agents Harmful to Health in the Working Environment (Międzyresortowa Komisja do Spraw Najwyższych Dopuszczalnych Stężeń i Natężeń Czynników Szkodliwych dla Zdrowia w Środowisku Pracy)
Singapore	1000	1880	Not available	Not available	Set in Singapore law
South Korea	1000	1900	Not available	Not available	Set in Korean law
Spain	Not available	Not available	1000	1910	Set by National Institute of Safety and Hygiene at Work (in Spanish: Instituto Nacional de Seguridad e Higiene en el Trabajo – INSHT).
Sweden	500	1000	1000(1)	1900(1)	Set in Swedish law
Switzerland	500	900	1000	1920	Set by theSwiss Accident Insurance Fund
Netherlands	Not available	260	Not available	1900	Set in Dutch law
USA – Noish	1000	1900	Not available	Not available	Set by National Institute for Occupational Safety and Health
USA – OSHA	1000	1900	Not available	Not available	Set by Occupational Safety & Health Administration (OSHA)
United Kingdom	1000	1980	Not available	Not available	Set by UK Health and Safety Executive

Remarks:	
Finland	(1) 15 Minutes average value
Germany (AGS)	(1) 15 Minutes average value
Germany (DFG)	(1) 15 Minutes average value
Ireland	(1) 15 Minute reference period
Sweden	(1) Short-term value, 15 minutes average value

Substance: Methyl ethyl ketone **CAS: 78-93-3**					
	Limit value- Eight hours		**Limit value – short term**		
Country	**ppm**	**Mg/ m3**	**ppm**	**Mg/m3**	**Legal basis**
Australia	150	445	300	890	Set by Safe Work Australia
Austria	100	295	200	590	Set by the OEL Regulation "Grenzwerteverordnung"
Belgium	200	600	300	900	**VLEP/GWBB**
Canada – Ontario	200	-	300	-	Based on Qubec VEA laws
Canada – Québec	50	150	100	300	Set by Quebec Commission for Occupational Health and Safety (Commission de la santé et de la sécurité du travail – CSST)
Denmark	50	145	100	290	Danish law
Finland	-	-	100 (1)	300 (1)	Finish law
France	**200**	**600**	**300**	**900**	French Labour Ministry
Germany (AGS)	200	600	200 (1)	600 (1)	German Committee on Hazardous Substances Ausschuss für Gefahrstoffe (AGS)
Germany (DFG)	200	600	200	600	DFG Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Arear (MAK Commission)
Hungary	-	600	200 (1)	600 (1)	Set byHungarian Institute of Occupational Health (HIOH – OMFI; department of the NFSZ – Nemzeti Foglalkoztatási Szolgálat (Nemzeti Munkaügyi Hivatal)) And largely based on EU limits
Ireland	200	600	300 (1)	900(1)	Based on UK Law
Japan	200	-	-	-	Japanes Ministry of Health, Labour and Welfare.
Latvia	67	200	300 (1)	900 (1)	Latvian law
New Zealand	150	445	300	890	Based on New Zealand law
People's Republic of China		300		600 (1)	Chinese law
Poland	-	450		900	Set by the Interdepartmental Commission for Maximum Admissible Concentrations and Intensities for Agents Harmful to Health in the Working Environment (Międzyresortowa Komisja do Spraw Najwyższych Dopuszczalnych Stężeń i Natężeń Czynników Szkodliwych dla Zdrowia w Środowisku Pracy)
Singapore	200	590	300	885	Set in Singapore law
South Korea	200	590	300	885	Set in Korean law
Spain	200	600	300	900	Set by National Institute of Safety and Hygiene at Work (in Spanish: Instituto Nacional de Seguridad e Higiene en el Trabajo – INSHT).
Sweden	50	150	100 (1)	300 (1)	Set in Swedish law
Switzerland	200	590	200	590	Set by theSwiss Accident Insurance Fund
Netherlands	200	590	300	900	Set in Dutch law and EU law
USA – Noish	200	590	300 (1)	885 (1)	Set by National Institute for Occupational Safety and Health
USA – OSHA	200	590	-	-	Set by Occupational Safety & Health Administration (OSHA)
United Kingdom	200	600	300	899	Set by UK Health and Safety Executive

Remarks:	
Finland	(1) 15 minutes average value
France	Bold type restrictive statutory value limits
Germany (AGS)	(1) 15 minutes average value
Germany (DFG)	STV 15 minutes average value
Ireland	(1) 15 minutes reference period
Latvia	(1) 15 minutes average value
People's Republic of China	(1) 15 minutes average value
Sweden	(1) Short-term value, 15 minutes average value
USA – NIOSH	(1) 15 minutes average value

Substance: Denatonium benzoate
CAS: 3734-33-6
No limits set by any country.
Used in extremely small quantities (around 10 parts to million) to create a bitter taste.

8.1.1.1 National occupational exposure limit values

Substance: Bio-Ethanol **CAS: 64-17-5**								
	Workers				**Consumers**			
Route of exposure	**Acute effect local**	**Acute effects systemic**	**Chronic effects local**	**Chronic effects systemic**	**Acute effects local**	**Acute effects systemic**	**Chronic effects Local**	**Chronic effects systemic**
Oral	Not required					Hazard identified but no DNEL available	Hazard identified but no DNEL available	Hazard identified but no DNEL available
Inhalation	1900mg/m^3	1.900 mg/m^3	Hazard identified but no DNEL available	950 mg/kg	950 mg/m^3	Hazard identified but no DNEL available	Hazard identified but no DNEL available	Hazard identified but no DNEL available
Dermal	Hazard identified but no DNEL available	Hazard identified but no DNEL available	Hazard identified but no DNEL available	343mg/kg bw/day	Hazard identified but no DNEL available	Hazard identified but no DNEL available	Hazard identified but no DNEL available	206 mg /kg

Substance: Methyl ethyl ketone **CAS: 78-93-3**								
	Workers				**Consumers**			
Route of exposure	**Acute effect local**	**Acute effects systemic**	**Chronic effects local**	**Chronic effects systemic**	**Acute effects local**	**Acute effects systemic**	**Chronic effects Local**	**Chronic effects systemic**
Oral	Not required					No hazard identified	No hazard identified	31 mg/kg bw/day
Inhalation	No hazard identified	No hazard identified	No hazard identified	600 mg/m^3	No hazard identified	No hazard identified	No hazard identified	106 mg/m^3
Dermal	No hazard identified	No hazard identified	No hazard identified	1 161 mg/kg bw/day	No hazard identified	No hazard identified	No hazard identified	412 mg/kg bw/day

Substance: Denatonium benzoate **CAS: 3734-33-6**								
	Workers				**Consumers**			
Route of exposure	**Acute effect local**	**Acute effects systemic**	**Chronic effects local**	**Chronic effects systemic**	**Acute effects local**	**Acute effects systemic**	**Chronic effects Local**	**Chronic effects systemic**
Oral	Not required					No hazard identified	No hazard identified	2.233 mg/kg bw/day
Inhalation	No hazard identified	No hazard identified	No hazard identified	15.748 mg/m^3	No hazard identified	No hazard identified	No hazard identified	3.883 mg/m^3
Dermal	No hazard identified	No hazard identified	No hazard identified	8.932 mg/kg bw/day	No hazard identified [2]	No hazard identified	No hazard identified	4.466 mg/kg bw/day

8.1.1.2 Occupational exposure limit values for Carcinogens and Mutagen content Directive 2004/37/EC

Not applicable as the formula does not contain any 1 a or 1b carcinogens listed in (EC) No 1272/2008, or any 1a or 1b mutagens listed in (EC) No 1272/2008.

8.1.1.3 Any other occupational exposure limit values

None other than those listed elsewhere in this safety data sheet.

8.1.1.4 National Biological limit values that correspond to Union Biological limit values in accordance with Directive 98/24/EC

See sections 8.1.1 and 8.1.1.1 and 8.1.1.5

8.1.1.5 Any other national biological limit values:

MAK and BAT values for Germany:

MAK Values for Ethanol content
ml/m3 (ppm): 500
mg/m3: 960
Peak Limitation: II (2)
H;S: None
Carcinogen Category: 5
Pregnancy Risk group: C
Germ cell mutagen category: 5
Vapour pressure in hPa at 20°C: 59
BAT Values: none

There are no other MAK or BAT values for any other ingredient within the mixture.

8.1.2 Recommended monitoring procedures:
Not applicable.
An ethanol vapour monitoring devices linked to extractor could be used for in the case of large spillages, but this is deemed not necessary as bioethanol quantities and containers are extremely small.

8.1.3 Air contaminants:
No air contaminants are formed, see tables in: 8.1.1.1

8.1.4 Derived No Effect Levels (ENEL/DMEL) Table (DNELs)

Substance: Bio-Ethanol **CAS: 64-17-5**								
	Workers				**Consumers**			
Route of exposure	**Acute effect local**	**Acute effects systemic**	**Chronic effects local**	**Chronic effects systemic**	**Acute effects local**	**Acute effects systemic**	**Chronic effects Local**	**Chronic effects systemic**
Oral	Not required					Hazard identified but no DNEL available	Hazard identified but no DNEL available	Hazard identified but no DNEL available
Inhalation	1900mg/m³	1.900 mg/m³	Hazard identified but no DNEL available	950 mg/kg	950 mg/m³	Hazard identified but no DNEL available	Hazard identified but no DNEL available	Hazard identified but no DNEL available
Dermal	Hazard identified but no DNEL available	Hazard identified but no DNEL available	Hazard identified but no DNEL available	343mg/kg bw/day	Hazard identified but no DNEL available	Hazard identified but no DNEL available	Hazard identified but no DNEL available	206 mg /kg

Substance: Methyl ethyl ketone **CAS: 78-93-3**								
	Workers				**Consumers**			
Route of exposure	**Acute effect local**	**Acute effects systemic**	**Chronic effects local**	**Chronic effects systemic**	**Acute effects local**	**Acute effects systemic**	**Chronic effects Local**	**Chronic effects systemic**
Oral	Not required					No hazard identified	No hazard identified	31 mg/kg bw/day
Inhalation	No hazard identified	No hazard identified	No hazard identified	600 mg/m³	No hazard	No hazard identified	No hazard identified	106 mg/m³

					identified			
Dermal	No hazard identified	No hazard identified	No hazard identified	1 161 mg/kg bw/day	No hazard identified	No hazard identified	No hazard identified	412 mg/kg bw/day

Substance: Denatonium benzoate **CAS: 3734-33-6**								
	Workers				**Consumers**			
Route of exposure	**Acute effect local**	**Acute effects systemic**	**Chronic effects local**	**Chronic effects systemic**	**Acute effects local**	**Acute effects systemic**	**Chronic effects Local**	**Chronic effects systemic**
Oral	Not required					No hazard identified	No hazard identified	2.233 mg/kg bw/day
Inhalation	No hazard identified	No hazard identified	No hazard identified	15.748 mg/m³	No hazard identified	No hazard identified	No hazard identified	3.883 mg/m³
Dermal	No hazard identified	No hazard identified	No hazard identified	8.932 mg/kg bw/day	No hazard identified [2]	No hazard identified	No hazard identified	4.466 mg/kg bw/day

PNEC Levels

Bioethanol:

Environmental protection target	**PNEC**
Fresh Water	960 µg/L
Fresh water sediments	3.6 mg/kg sediment dw
Marine water	790 µg/L
Marine sediments	2.9 mg/kg sediment dw
Food chain	No hazard identified
Microorganisms in sewage treatment	39.5 g/L
Soil (agriculture)	0.63 mg/kg soil dw
Air	No hazard identified

Methyl ethyl ketone

Environmental protection target	**PNEC**
Fresh Water	55.8 mg/L
Fresh water sediments	284.74 mg/kg sediment dw
Marine water	55.8 mg/L
Marine sediments	284.7 mg/kg sediment dw
Food chain	No hazard identified
Microorganisms in sewage treatment	709 mg/L
Soil (agriculture)	22.5 mg/kg soil dw
Air	No hazard identified

Denatonium benzoate

Environmental protection target	**PNEC**
Fresh Water	100 µg/L
Fresh water sediments	33.692 mg/kg sediment dw
Marine water	10 µg/L
Marine sediments	3.369 mg/kg sediment dw
Food chain	No hazard identified
Micro organisms in sewage treatment	51.158 mg/L
Soil (agriculture)	16.127 mg/kg soil dw
Air	No hazard identified

8.1.5 Control Banding

This approach is not used for risk management for this product.

8.2 Exposure Controls

8.2.1 Appropriate engineering controls

No specific engineering controls are required

8.2.2 Individual protection measures, such as personal protective equipment.

Wear latex, or neoprene gloves when using.
Do not smoke whilst using this product.

8.2.2.1 Personal protective equipment for fire control
See section 5.

8.2.2.2. Protection equipment:

(a) Eye protection : Safety glasses or goggles may be worn to inhibit contact with eyes.

(b) Hand protection: Wear latex, or neoprene gloves when using. Neoprene gloves of to standard ASTM D 6319 is sufficient. Thickness of 250 Micron recommended.

(c) Respiratory protection: Not required

(d) Thermal hazards

No thermal hazards present except in the case of fire.

8.2.3 Environmental exposure controls

Subsequent advice: Avoid pouring Green Oil Dry Chain Wax directly into rivers and water ways.

SECTION 9: Physical and chemical properties

9.1 Information on the basic physical and chemical properties

(a) Appearance: Milky white with yellow tinge liquid.

(b) Odour: Strong alcoholic vodka like scent.

(c) Odour threshold: No information available

(d) pH: 6-6.5

(e) Melting point/ freezing point: -49^{O}C

(f) Initial boiling point and boiling range: 78.37 ^{o}C and above

(g) Flash point; 17^{O}C

(h) Evaporation rate: 0.01

(i) Flammability (solid, gas): Flammable as liquid and gas.

(j) Flammability limits
Upper: No data available
Lower: No data available

(k) Vapour pressure: ca. 50 mm Hg (at 20 °C)

(l) Vapour density: ca. 1.5

(m) Relative density: 0,79 g/cm³ @ 20 °C (200 pf)

(n) Solubility(ies): Partially soluble in water. Miscible with alcohol

(o) Partition Coefficient: n-octanol /water: Not available

(p) Auto-ignition temperature: 425 ^{o}C

(q) Decomposition temperature: Not available

(r) Viscosity: 10.29 mPa's

(s) Explosive properties:

Upper Explosion limit (UEL): 19% (at 150°C)
Lower Explosion limited (LEL): 3.3% (at 150°C)

(t) Oxidising properties: Does not meet the criteria for classification as oxidising.

9.2 Other information

Green Oil Dry Chain Wax contains a plant based solvent, an alcohol made from sugar which dries rapidly.

SECTION 10: Stability and Reactivity

10.1 Reactivity

Keep away from heat and sources of ignition.

Hazardous decomposition products include carbon dioxide, carbon monoxide and possibly other unidentified organic compounds.

10.2 Chemical stability

Under storage at normal ambient temperatures (minus 40°C to + 40°C), the product is stable.

Normal shelf life tested: 3 years in enclosed bottle.

10.3 Possibility of hazardous reactions

Materials to avoid: Strong oxidizing agents; inorganic acids, and halogens.
Keep away from heat and sources of ignition.

10.4 Conditions to avoid

Heat flames, sparks, and static discharge.
(Static discharge an unlikely source of ignition for the vapour only)

10.5 Incompatible materials

Strong oxidizing agents; inorganic acids, and halogens.

10.6 Hazardous decomposition products

Hazardous decomposition products from combustion only, include carbon dioxide, carbon monoxide and possibly other unidentified organic compounds.

Flammable vapour through evaporation is produced when exposed to air.

Product is fully biodegradable producing carbon, CO_2, and minerals which can be absorbed by plants, excluding denotonium benzoate at less than 10ppm.

Denatonium benzoate is a completely non-hazardous, non toxic, environmentally safe material. It is safe for human consumption and not harmful in the environment. It is used to 'denature' the alcohol by making it taste too bitter to drink. This stops children drinking the product, which would make them extremely drunk. It also negates the need to charge alcohol duty – denatured alcohol which is not for human consumption is exempt.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

(a) Acute toxicity; Consuming this product at more than 10-12 grams per day will not cause liver cirrhosis. OSHA Category 5. May be harmful if swallowed.

Acute toxicity estimate: 2,340 mg/kg
Method: Calculation method

Acute toxicity estimate: 5,000 mg/kg
Method: Calculation method

(b) Skin irritation; Can cause skin irritation through skin drying and dermatitis.

(c) Eye irritation; Irritating to eyes due to alcohol content.

(d) Sensitisation; Sensitizer on some skin types. Can cause dryness of skin with repeated exposure to skin through defatening.

(e) Germ cell mutagenicity; not a mutagen.

(e) Repeated dose toxicity; Nauseous sensation and possible vomiting, the same affect as consuming alcohol.

(f) Carcinogenicity; Not more carcinogenic than any alcohol, though more potent than alcoholic drinks designed for consumption due to bioethanol content.
For the genotoxic carcinogenic effects, the total internal exposure is the relevant exposure estimate. The total internal exposure (or AUC) after drinking one glass of beer is comparable with the AUC after eight hour exposure to 1900 mg/m3 ethanol.
A healthy subject is considered to metabolize between 6 and 9 g ethanol per hour. This product is not for human consumption but poses a minimal carcogenicity risk.

Effect on development of offspring and possible cirrhosis of the liver. However, consuming this product at less than 10-12 grams per day will not cause liver cerhosis.
Even long term oral exposure to levels of 1-12 gram ethanol per day might result in effects on the development (like increased incidence of spontaneous abortion, foetal death, pre-term delivery and decreased length of gestation) and fertility, according to the Committee on Alcohol consumption and reproduction.

Category 5 Carcinogen in Germany only, due to the bioethanol (alcohol) content.

(g) Toxicity for reproduction; Effect on development of offspring and possible cirrhosis of the liver. Long term oral exposure to levels of 1-12 gram ethanol per day might result in effects on the development of foetus (like increased incidence of spontaneous abortion, foetal death, pre-term delivery and decreased length of gestation) and fertility, according to the Committee on Alcohol consumption and Reproduction. This is due to ethanol being an alcohol. Alcohol should not be consumed during pregnancy. This product is not or human consumption.

(h) STOT Single Exposure; See sections (f) and (g) above foetal and liver impact. Product is not for drinking. Only exposure risk is through drinking.

(i) STOT-Repeated Exposure; no data available. See sections (f) and (g) above foetal and liver impact. Product is not for drinking. Only exposure risk is through drinking.

(j) Aspiration hazard; not an aspirational hazard.

SECTION 12: Ecological information

12.1 Toxicity
Toxic to:
Algae aquatic plants
Crustacea
Low potential to affect aquatic organisms and secondary waste treatment organisms.
LC50 (Trout) 96 hours 13,000 mg/l
LC50 (P. Promelas (fathead minnow)) 96 hours 15,300 mg/l
LC50 (Goldfish) 8 hours 250 ppm.

12.2 Persistence and degradability
Readily biodegradable – 28 days in sewage and freshwater.

Readily biodegradable, not biopersistent. Miscible with water and evaporates quickly.

Green Oil Dry Chain Wax exceeds standard ASTM D65866 on biolubricants.
Readily biodegradable (within 28 days) in sewage, fresh water and soil in accordance with OECD 301.

Green Oil Dry Chain Wax is both a *bio-based lubricant* and *bio-lubricant* in accordance with British Standards Institute PD CEN/TR 16227. Green Oil Wet Chain Lube exceeds 25% minimum content of renewable raw material within the standard CEN/TR 16227 (2011) definition of bio-based. It is over 99.999% biobased raw materials.

This product exceeds the 25% renewable material content threshold set out in standard ASTM D 65866.

Lubricant exceeds 25% minimum content of renewable raw material within the standard CEN/TR 16227 (2011) definition of Bio-based.

Product is readily biodegradable within 28 days according to criteria set down by the OECD.

Product exceeds minimum 60% biodegradation for lubricant products set out by British Standards Institute CEN/TR 16227.

12.3 Bioaccumulative potential
Biodegradable, will not bioaccumulate. Does not bio-accumulate in food chain.

12.4 Mobility in soil
Not mobile in soil. Volatises rapidly, low potential for mobility in soil.
Will rapidly volatilize from both dry and moist soil.

12.5 Results of PBT and vPvB assessment
This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse affects
No petrochemical ozone creation potential, ozone depletion potential, endocrine disrupting potential or global warming potential applies to this product

SECTION 13: Disposal considerations

13.1 Waste treatment methods

13.1.1 Product packaging disposal:

Bottle recyclable made from HDPE recycled and recyclable plastic.

Bottle material code: 

Cap not usually recyclable. Made from PET:

Cap material code: 

13.1.2 Waste treatment-relevant information:
Fluid can be disposed of in sealed bottle to land fill, or in an industrial or home composting facility as the formula is biodegradable.

13.1.3 Sewage disposal-relevant information:
Product can be disposed of with normal sewage.

13.1.4 Other disposal recommendations:
Always follow local government, national and federal regulations where applicable.

SECTION 14: Transport information

14.1 UN Number

Ethanol content: UN 1170
Covered by 'Limited Quantity' rules. As packaging is less than 1 litre (each bottle is 100ml), Dangerous Goods rules do not apply.

Bioethanol is not covered by the UN Dangerous Goods List,
Bioethanol is not classed by IMDG as a marine pollutant.
Bioethanol is not a IATA pollutant.
Other ingredients in small quantities are exempt.

14.2 UN proper shipping name

Ethanol
(Ethanol is the proper shipping name of the hazardous element within Green Oil Dry Chain Wax)

14.3 Transport hazard class(es)

Transport category: Class 3 Hazardous
Tunnel code: D/E
Special precautions: None

14.4 Packing group

Packing group II (Limited quantity)

14.5 Environmental hazards

None

14.6 Special precautions for user
None

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code
Not applicable. Product sent in limited quantity bottles, not in IBC (1000 litre) vessels

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specifically for substance or mixture

This safety data sheet complies with United Nations Globally Harmonised System of Classification and Labelling of Chemicals, OSHA and CLP Regulation (EC) No 1272/2008 (which replaces the Dangerous Substances Directive 1999/45/EC) and REACH EC No 1907/2006.

This Safety Data Sheet also complies with OSHA in the USA and local national laws aligned with United Nations GHS (Globally Harmonized System of Classification and Labelling of Chemicals).

None of the substances within this mixture are Substances of Very High Concern (SVHCs) within Reach.

This product, nor the contents are covered or restriction by Regulation (EC) No 649/2012, or Regulation (EC) No 1005/2009 on ozone layer depletion.

Deutschland:
Wassergefährdungsklassen: *WGK 1*

France:
Aucun ingrédient avec le produit sont en taleaux de maladies professionelles (http://www.inrs-mp.fr/)

Neederland:
Only ethanol is in the Lijst van kankerverwekkende, mutagene, en voor de voortplanting giftige stoffen SZW.

Ethanol:
Fertility: 1
Development: 1
Breast feeding: NA

USA OSHA Hazards :
Combustible Liquid. Moderate eye irritant.

EPCRA - Emergency Planning and Community Right-to-Know Act
This data sheet may be used within plans created in accordance with EPCRA.

CERCLA Reportable Quantity.
This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards: Fire Hazard Acute Health Hazard

SARA 302 : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313: SARA 313: This material does not contain any chemical components with known

CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act
This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act
This product does not contain any Hazardous Substances listed under the U.S. Clean Water Act, Section 311, Table 116.4A.
This product does not contain any Hazardous Chemicals listed under the U.S. Clean Water Act, Section 311, Table 117.3.
This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307.

US State Regulations

Massachusetts Right To Know Act. No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

Bioethanol: CAS number: 64-17-5	0-100%
Rapeseed Oil:	0-100%
Bees Wax:	0-100%
Specialised rosemary extract:	0-100%
Methyl ethyl ketone: CAS number: 78-93-3	<1% ppm
Denatonium benzoate: CAS number: 3734-33-6	<20ppm

California Prop 65:
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm. The components of this product are reported in the following inventories:

United States TSCA Inventory:
Bioethanol: y (positive listing)

Canadian Domestic Substances List (DSL):
All substances in this product are included in the Canadian Domestic Substance List, the list of all chemicals manufactured in or imported into Canada.

15.2 Chemical Safety Assessment

Chemical Safety Assessments have been carried out for all hazardous parts of this mixture and this safety data sheet and data within is based upon these and the mixture as a whole.

No Volatile Organic Compounds (VOCs) are produced by this product.

SECTION 16: Other Information

This revised Safety Data Sheet was published on Friday 22nd March 2019 in compliance with CLP Regulation (EC) No 1272/2008 in accordance with Globally Harmonized System of Classification and Labelling of Chemicals (GHS).
Reason for update: New distributors, technical update and new email address applied.

Changes include:

(a) Additional information provision

(b) Acronyms.
MSDS = Material Safety Data Sheet.
SDS = Safety Data Sheet.
GHS = Globally Harmonized System of Classification and Labelling of Chemicals.

(c) References

(d) Methodology for this Safety Data Sheet is in accordance with EC No 1972/2008. Many figures have been obtained and calculated from Safety Data Sheets of Each substance. EHCA (European Chemicals Agency) databases have been utilized, along with those of the US Environmental Protection Agency, the Canadian Government and the British Health and Safety Executive. This list is not exhaustive.

Classification procedure for all Hazard Phrases (see section 2.2) for all substances, and by that, this product according to Regulation (EC) Nr. 1272/2008 is based on data and of the European Chemicals Agency and expert judgement.

(e) Relevant Hazard Statements

H225	Highly flammable liquid and vapour
H320	Causes skin and eye irritation

P101	If medical advice is needed, have product container or label to hand.
P102	Keep out of reach of children
P103	Read label before use
P210	Keep away from sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed
P270	Do not eat, drink or smoke when using this product
P370 + P378	In case of fire: Use foam or CO_2 to extinguish

P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P370 + P378	In case of fire: Use foam or CO_2 to extinguish

P501	Dispose of contents to compost bin or suitable waste disposal facility. Dispose of bottle to HDPE recycling bank and cap to PP recycling bank if possible

(e) Staff Training Advice

Staff using this product professionally should read through this safety data sheet, or have it read to them.

Disclaimer:

This information is based upon the present state of our knowledge.
This SDS has been compiled and is solely intended for this product.