VO-LI-041

VERYONE® - Material Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No. 2015/830)

Version: 1 *Version date: 12/06/2019* *Language: EN*

1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1-1 Product identifier

Product Name: VeryOne® Lubricity Improver 041
Product code: VO-LI-041
Product type: Blend

1-2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Fuel additive.
Uses advised against: No data available.

1-3 Details of the supplier of the safety data sheet

VeryOne - SORGUES site:
1928, avenue d'Avignon
CS 90109 SORGUES
84275 VEDENE CEDEX
Tel: + 33(0)4.90.33.62.00 (8am-7pm, GMT+1)
Fax: + 33(0)4.90.39.52.64
E-mail: fds@veryone.com

1-4 Emergency Telephone Number

European Union: 112
Official advisory body UK : National Poisons Information: +44 870 600 6266
VeryOne: +33.(0)4.90.33.62.00 (8am-7pm, GMT+1)

2 - HAZARDS IDENTIFICATION

2-1 Classification of the substance or mixture

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

- **Hazard statements for human health:**

Aspiration Toxicity, category 1, H304
STOT (oral exposure – central nervous system) – single exposure, category 3, H336
Carcinogenicity, category 2, H351

- **Hazard statements for environmental effects:**

Chronic (long term) aquatic hazard, category 2, H411

2-2 Label elements

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

Hazard pictograms:	
Signal word:	Danger
Product identifiers:	-
Hazard Statements:	H304 - May be fatal if swallowed and enters airways. H336 - May cause drowsiness or dizziness H351 - Suspected of causing cancer. H411 - Toxic to aquatic life with long lasting effects.
Supplemental Hazard information (EU):	EUH066 - Repeated exposure may cause skin dryness or cracking.
Precautionary Statements – General:	-
Precautionary Statements – Prevention:	P261: Avoid breathing dust/fume/gas/mist/vapours/spray. P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P280: Wear protective gloves/protective clothing/eye protection/face protection. P273: Avoid release to the environment.
Precautionary Statements – Response:	P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor if you feel unwell P308+P313: If exposed or concerned : get medical advice/attention. P331: Do NOT induce vomiting.
Precautionary Statements – Storage:	P403 + P233: Store in a well-ventilated place. Keep container tightly closed.
Precautionary Statements – Disposal:	P501: Dispose of contents and container in accordance with local regulations.

2-3 Other hazards

Not available

3 - COMPOSITION/INFORMATION ON INGREDIENTS

3-1 Substances

Not applicable.

3-2 Mixtures

Substance	C (%)	Classification	Specific concentration limits
Hydrocarbons, C10, aromatics, >1% naphthalene CAS N°: EC N°:919-284-0 IDX N°: REACH Registration: 01-2119463588-24-XXXX	10-100	H304 - May be fatal if swallowed and enters airways. H336 - May cause drowsiness or dizziness H351 - Suspected of causing cancer. H411 - Toxic to aquatic life with long lasting effects. EUH066 - Repeated exposure may cause skin dryness or cracking.	See section 8.1

The mixture does not contain any substances classified as Substances of Very High Concern (SVHC) by the European Chemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table.

3-3 Remark

Text phrases and H-/EUH-: see section 16.

4 - FIRST AID MEASURES

4-1 Description of first aid measures

General information:
When in doubt or if symptoms are observed, get medical advice. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Do not leave affected person unattended. Keep affected person warm, still and covered.

Following inhalation
Provide fresh air. Remove person to fresh air and keep comfortable for breathing. No resuscitation mouth-to-mouth or mouth-to-nose. Ambu use a mask or respirator. If breathing is irregular or stopped, administer artificial respiration.

Following skin contact
Wash with soap and water. Change contaminated, saturated clothing.

Following eye contact
In case of eye irritation consult an ophthalmologist. Rinse immediately carefully and thoroughly with eye-bath or water.

Following ingestion
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps.

4-2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2-2) and/or in section 11.

4-3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor:
Treat symptomatically.

5 - FIREFIGHTING MEASURES

5-1 Extinguishing media

Suitable extinguishing media:
Water fog. Foam. Extinguishing powder. Carbon dioxide (CO2).

Unsuitable extinguishing media:
Strong water jet.

5-2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

5-3 Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5-4 Additional information

Do not inhale vapors and fumes. Co-ordinate fire-fighting measures to the fire surroundings. Move undamaged containers from immediate hazard area if it can be done safely. Use caution when applying carbon dioxide in confined spaces. carbon dioxide can displace oxygen. Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

6 - ACCIDENTAL RELEASE MEASURES

6-1 Personal precautions, protective equipment and emergency procedures

No special measures are necessary. Use personal protection equipment. Remove persons to safety. Use appropriate respiratory protection. Provide adequate ventilation.

6-2 Environmental precautions

Ensure that waste is collected and contained. Avoid release to the environment.
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it.

6-3 Methods and material for containment and cleaning up

Treat the recovered material as prescribed in the section on waste disposal. Collect in closed and suitable containers for disposal. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Wipe up with absorbent material (eg. cloth, fleece). Clean contaminated objects and areas thoroughly observing environmental regulations. Ventilate affected area.

6-4 Reference to other sections

Safe handling: see section 7.

Disposal: see section 13.

Personal protection equipment: see section 8.

6-5 Additional information

Not available.

7 - HANDLING AND STORAGE

7-1 Precautions for safe handling

Avoid exposure - obtain special instructions before use. Use only outdoors or in a well-ventilated area.
Fixed storage containers, transfer containers and associated equipment should be earthed and bonded to prevent accumulation of static charge.

Protective measures:
Avoid contact with skin, eyes and clothes. Avoid breathing gas/fumes/vapour/spray.
Avoid open flames and high energy ignition sources.
Provide adequate ventilation as well as local exhaustion at critical locations, or the use of adequate respiratory protection.
Only allow access to authorised staff.
Sewers and ducts must be protected against the entry of the product.

Advices on general occupational hygiene:
Wash hands before breaks and after work.
Remove contaminated, saturated clothing.
Work in well ventilated zones or use proper respiratory protection.

7-2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry, cool, and well-ventilated place. Keep container in upright position in order to prevent leakage.

Requirements for storage rooms and vessels:
Store locked up.
Ensure adequate ventilation of the storage area.

Use isolated drainage to prevent discharge to soil.

Advice on joint storage
Keep away from (strong) acids and (strong) bases.
Keep away from food, drink and animal feedingstuffs.

7-3 Specific end uses

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

8-1 Control parameters

EXPOSURE LIMIT VALUES

Exposure limits/standards:

Substance Name	Form	Limit/Standard			Note	Source
Hydrocarbons, C10, aromatics, >1% naphthalene	Vapour	RCP-TWA	100mg/m^3	17ppm	Total Hydrocarbons	ExxonMobil
Naphthalene	-	TWA	10 ppm	-	Skin	ACGIH
Naphthalene	-	TWA	50 mg/m^3		Skin	INRS

***Note**: Information about recommended monitoring procedures can be obtained from the relevant agency(ies)/ institute(s): UK Health and Safety Executive (HSE), and INRS.*

8-2 Exposure controls

Technical measures and the application of suitable work processes have priority over personal protection equipment (see section 7).

Personal protection equipment

Eye/face protection:
Eye protection suitable to chemical hazards.

Skin protection:
Hand protection: Wear suitable protective gloves.
Recommendation: Viton, minimum 0.71 mm thickness or comparable protective barrier material with a high performance level for continuous contact use conditions, permeation breakthrough minimum 480 minutes in accordance with CEN standards EN 420 and EN 374.

Body protection:
Wear suitable protective clothes.
Recommendation: chemical/oil resistant clothing.

Respiratory protection:
Respiratory protection necessary at: If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.
Recommendation: Half-face filter respirator Type A filter material. For high airborne concentrations, use an approved supplied-air respirator.

Environmental exposure controls:
Ensure that waste is collected and contained. Avoid release to the environment.
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it.

8-3 Additional information

Not available

9 - PHYSICAL AND CHEMICAL PROPERTIES

9-1 Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Light to dark yellow
Odour:	Aromatic
Odour threshold:	No data available
pH:	< 7
Melting point/freezing point:	< - 6 °C
Initial boiling point and boiling range:	> 180 °C
Flash point:	> 65 °C (ASTM D-93)
Evaporation rate:	0.08 for the substance: Hydrocarbons, C10, aromatics, >1% naphthalene
Flammability:	No data available.
Upper/lower flammability or explosive limits:	UEL: 7.0 LEL: 0.9 [Extrapolated for the substance: Hydrocarbons, C10, aromatics, >1% naphthalene]
Vapour pressure:	0.08 kPa at 20°C [Calculated for the substance: Hydrocarbons, C10, aromatics, >1% naphthalene]
Vapour density:	4.6 at 101 kPa for the substance : Hydrocarbons, C10, aromatics, >1% naphthalene
Relative density:	ca. 0.9 (20 °C)
Solubility(ies):	Water: < 0.005 g/100ml (25 °C)
Partition coefficient: n-octanol/water (Log KOC):	< 4 [Estimated for the substance : Hydrocarbons, C10, aromatics, >1% naphthalene]
Auto-ignition temperature:	> 300 °C
Decomposition temperature:	No data available

Viscosity:	< 15 $mm^2.s^{-1}$ (20 °C) et < 40 $mm^2.s^{-1}$ (0 °C)
Explosive properties:	No data available
Oxidising properties:	No data available

9-2 Other safety information

Not available.

10 - STABILITY AND REACTIVITY

10-1 Reactivity

See sub-sections below.

10-2 Chemical stability

Material is stable under normal conditions.

10-3 Possibility of hazardous reactions

No additional information available.

10-4 Conditions to avoid

Open flames and high energy ignition sources.

10-5 Incompatible materials

Strong oxidisers, strong acids and strong bases.

10-6 Hazardous decomposition products

Material does not decompose under normal conditions.

10-7 Additional information

Not available.

11 - TOXICOLOGICAL INFORMATION

No information available on the end product. The product is classified according to the calculation rules defined by the applicable regulations.

11-1 Substance information

Below the information of the substance “Hydrocarbons, C10, aromatics, >1% naphtalene”, present at a concentration of [10;100] % in this blend.

Hazard Class	Conclusion / Remarks
Inhalation	
Acute Toxicity: (Rat) 4 hour(s) LC50 > 4688 mg/m^3 (Vapour) Test scores or other study results do not meet criteria for classification.	Minimally Toxic. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 403
Irritation: No end point data for material.	Elevated temperatures or mechanical action may form vapours, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs.
Ingestion	
Acute Toxicity (Rat): LD50 > 5000 mg/kg Test scores or other study results do not meet criteria for classification.	Minimally Toxic. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 401
Skin	
Acute Toxicity (Rabbit): LD50 > 2000 mg/kg Test scores or other study results do not meet criteria for classification.	Minimally Toxic. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 402
Skin Corrosion/Irritation: Data available. Test scores or other study results do not meet criteria for classification.	May dry the skin leading to discomfort and dermatitis. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 404
Eye	
Serious Eye Damage/Irritation: Data available. Test scores or other study results do not meet criteria for classification.	May cause mild, short-lasting discomfort to eyes. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 405
Sensitisation	
Respiratory Sensitization: No end point data for material.	Not expected to be a respiratory sensitizer.
Skin Sensitization: Data available. Test scores or other study results do not meet criteria for classification.	Not expected to be a skin sensitizer. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 406
Aspiration: Data available.	May be fatal if swallowed and enters airways. Based on physico-chemical properties of the material.
Germ Cell Mutagenicity: Data available. Test scores or other study results do not meet criteria for classification.	Not expected to be a germ cell mutagen. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 471 473 474 475 476 479
Carcinogenicity: No end point data for material.	Caused cancer in laboratory animals, but the relevance to humans is uncertain. Based on assessment of the components.
Reproductive Toxicity: Data available. Test scores or other study results do not meet criteria for classification.	Not expected to be a reproductive toxicant. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 414 416
Lactation: No end point data for material.	Not expected to cause harm to breast-fed children.
Specific Target Organ Toxicity (STOT)	
Single Exposure: No end point data for material.	May cause drowsiness or dizziness.

Repeated Exposure: Data available. Test scores or other study results do not meet criteria for classification.	Not expected to cause organ damage from prolonged or repeated exposure. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 408 413 452

Additional information
For the substance (Hydrocarbons, C10, aromatics, >1% naphthalene) itself:
Vapour concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anaesthetic and may have other central nervous system effects. Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

Contains:
NAPHTHALENE: Exposure to high concentrations of naphthalene may cause destruction of red blood cells, anemia, and cataracts. Naphthalene caused cancer in laboratory animal studies, but the relevance of these findings to humans is uncertain.

Name	Acute Toxicity
Naphthalene	Inhalation Lethality: 4 hour(s) LC50 > 0.4 mg/l (Max attainable vapor conc.) (Rat); Oral Lethality: LD 50 533 mg/kg (Mouse)

11-1-1 Information on the mixture

No information available on the product. All mentioned information relates to the substance “Hydrocarbons, C10, aromatics, >1% naphtalene”, present at a concentration of [10;100] % in this blend.

11-1-2 Information on likely routes of exposure

The routes of likely exposures under normal use of the product are by inhalation, skin and ingestion contact.

11-1-3 Symptoms related to the physical, chemical and toxicological characteristics

See section 4-2.

11-1-4 Delayed, immediate and chronic effects of short or long term exposure

See section 4-2.

11-1-5 Interaction effects

No data available.

11-1-5 Absence of specific data

No information available on the product. All mentioned information relates to the substance “Hydrocarbons, C10, aromatics, >1% naphtalene”, present at a concentration of [10;100] % in this blend.

12 - ECOLOGICAL INFORMATION

12-1 Toxicity

Data for mixture:
No information available on the product.

Substances:
The information below relates to the substance “Hydrocarbons, C10, aromatics, >1% naphthalene”, present at a concentration of [10;100] % in this blend.

Expected to be toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Test	Duration	Organism Type	Test Results
Aquatic - Acute Toxicity	48 hour(s)	Daphnia magna	EL50 >=3-<=10 mg/l: data for the material
Aquatic - Acute Toxicity	96 hour(s)	Oncorhynchus mykiss	LL50 >=2-<=5 mg/l: data for the material
Aquatic - Acute Toxicity	72 hour(s)	Pseudokirchneriella subcapitata	NOELR 1 mg/l: data for the material
Aquatic - Acute Toxicity	72 hour(s)	Pseudokirchneriella subcapitata	EL50 >=1-<=3 mg/l: data for the material

12-2 Persistence and degradability

Data for mixture:
No information available on the product.

Substances:
The information below relates to the substance “Hydrocarbons, C10, aromatics, >1% naphthalene”, present at a concentration of [10;100] % in this blend.

Biodegradation:
Material - Expected to be inherently biodegradable

Hydrolysis:
Material - Transformation due to hydrolysis not expected to be significant.

Photolysis:
Material - Transformation due to photolysis not expected to be significant.

Atmospheric Oxidation:
Material - Expected to degrade rapidly in air

12-3 Bioaccumulative potential

The product has not been tested.

12-4 Mobility in soil

Data for mixture:
No information available on the product.

Substances:
The information below relates to the substance “Hydrocarbons, C10, aromatics, >1% naphthalene”, present at a concentration of [10;100] % in this blend.

Expected to partition to sediment and wastewater solids. Moderately volatile.

12-5 Results of PBT and vPvB assessment

This product is not, or does not contain, a substance that is a PBT or a vPvB.

12-6 Other adverse effects

No adverse effects are expected.

12-7 Additional ecotoxicological information

Data for mixture:
No information available on the product.

Substances:
The information below relates to the substance “Hydrocarbons, C10, aromatics, >1% naphthalene”, present at a concentration of [10;100] % in this blend.

Persistence, Degradability and Bioaccumulation Potential (substance)

Media	Test Type	Duration	Test Results: Basis
Water	Ready Biodegradability	28 day(s)	Percent Degraded 58

13 - DISPOSAL CONSIDERATIONS

13-1 Waste treatment methods

Product/Packaging disposal
Collect the waste separately.
Dispose of waste according to applicable legislation.
Handle contaminated packages in the same way as the substance itself.
Non-contaminated packages must be recycled or disposed of.
Contaminated packing must be either disposed of or completely emptied and can be reused after proper cleaning, according to applicable legislation.

13-2 Additional information

Not available.

14 - TRANSPORT INFORMATION

	Land transport (ADR/RID)	Inland waterway transport (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI/IATA-DGR)
14-1 UN number	3082	3082	3082	3082
14-2 UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s.	Environmentally hazardous substance, liquid, n.o.s.	Environmentally hazardous substance, liquid, n.o.s.	Environmentally hazardous substance, liquid, n.o.s.
14-3 Transport hazard class(es)	-	-	-	-
Class or Division	9	9	9	9
Hazard label(s)				
14-4 Packing group	III	III	III	III

14-5 Environmental hazards

Not regulated.

14-6 Special precautions for user

Not regulated.

14-7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not regulated.

14-8 Additional information

Not available.

15 - REGULATORY INFORMATION

15-1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This MSDS has been established in accordance with REACH regulation, including its amendments: REACH Regulation (EC) No 1907/2006. This SDS has been established in accordance with CLP regulation, including its amendments: CLP Regulation EC No. 1272/2008.

15-2 Chemical Safety Assessment

Not available.

15-3 Additional information

Not available.

16 - OTHER INFORMATION

Creation date	Version Date	Printing Date
12/06/2019	12/06/2019	12/06/2019

16-1 Indication of changes

Not applicable (first edition of the MSDS).

16-2 Abbreviations and acronyms

ADN/ADNR: Regulations concerning the transport of dangerous substances in barges on the waterways. ADR/RID: European Agreement concerning the International Carriage of Dangerous Goods by Road/Regulations concerning the international carriage of dangerous goods by rail. CAS: Chemical Abstract Service Number. IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods Code. DPD Dangerous Preparation Directive. UN number: United Nations number. No EC: European Commission Number. CLP: Classification, labeling and packaging. VPvB: very persistent and very bioaccumulative substances.

16-3 Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]

Classification of the mixture is in accordance with the evaluation method described in Regulation (EC) No 1272/2008.

16-4 Relevant R-, H- and EUH-phrases (Number and full text)

H304	Asp. Tox. 1	May be fatal if swallowed and enters airways.
H336	STOT SE 3 H336	May cause drowsiness or dizziness
H351	Carc. 2	Suspected of causing cancer.
H411	Aquatic Chronic 2	Toxic to aquatic life with long lasting effects.
EUH066		Repeated exposure may cause skin dryness or cracking

16-5 Additional information

Not available.

The information given in this Safety Data Sheet is based on our present knowledge and on european and national regulations.This Safety Data Sheet describes safety requirements relative to identified uses, it doesn't guarantee all the product properties particularly in the case of non identified uses.The product mustn't be used for any uses other than those identified under heading 1.Since the user's working conditions are not known by us, it is the responsability of the user to take all necessary measures to comply with legal requirements for specific uses and avoid negative health effects.

***** End of MSDS Document *****

Commercial office
30 avenue Carnot, 91300 Massy, France
Tel: +33 (0)1 80 00 21 90 – 22 32
www.veryone.com

Registered office & Sorgues Plant
1928 Avenue d'Avignon
CS 90109 Sorgues
84275 Vedène, France
834 228 611 RCS Avignon -
Tel : +33 (0)4 90 33 62 00 – 63 26
S.A.S. / *Ltd. Co. with a share capital of* :
11,000,000 €

VeryOne Inc.
12621 Featherwood, Suite 230
Houston, Texas 77034
USA
Tel/ office : (281) 922 9911