



Octane Booster

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Issue date: 25-10-2019 Revision date: 24-7-2020 Supersedes: 25-10-2019 Version: 1.1

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

1.1. Product identifier

Product form : Mixture
Trade name : Octane Booster
Product code : PW.40.18
Type of product : Additive
Product group : Trade product

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

1.2.1. Relevant identified uses

Intended for general public
Main use category : Industrial use, Professional use, Consumer use
Use of the substance/mixture : Fuel additive

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Putoline Oil
Dollegoorweg 15
7602 EC Almelo - Netherlands
T 0031 (0)546 81 81 65
vib@putoline.com

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	National Poisons Information Service (Cardiff Centre) Gwenwyn Ward, Llandough Hospital	Penarth CF64 2XX Cardiff	0344 892 0111	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Aspiration hazard, Category 1 H304
Hazardous to the aquatic environment — Chronic Hazard, Category 3 H412
Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Harmful if inhaled. May be fatal if swallowed and enters airways. Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP) :



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	GHS08
Signal word (CLP)	: Danger
Hazardous ingredients	: Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics, benzene <0,1%
Hazard statements (CLP)	: H304 - May be fatal if swallowed and enters airways. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P101 - If medical advice is needed, have product container or label at hand. P102 - Keep out of reach of children. P273 - Avoid release to the environment. P301+P310+P331 - IF SWALLOWED: Immediately call a doctor. Do NOT induce vomiting. P405 - Store locked up. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
EUH-statements	: EUH066 - Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics, benzene <0,1%	(CAS-No.) (1174522-09-8) (EC-No.) 918-481-9 (REACH-no) 01-2119457273-39	≥ 50	Asp. Tox. 1, H304
Tricarbonyl(methylcyclopentadienyl)manganese	(CAS-No.) 12108-13-3 (EC-No.) 235-166-5 (REACH-no) 01-2119495971-23	< 2,5	Acute Tox. 3 (Oral), H301 Acute Tox. 2 (Dermal), H310 Acute Tox. 2 (Inhalation:dust,mist), H330 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after skin contact	: Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after ingestion	: Risk of lung oedema.

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

Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.
Storage temperature : 5 – 40 °C

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

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8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:					
Protective gloves					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	≥ 0.35		EN ISO 374

Eye protection:			
Safety glasses			
Type	Use	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: amber.
Odour	: characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: > 160 °C
Flash point	: > 62 °C
Critical temperature	: > 200 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: 100 Pa @20°C
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0,776 g/cm ³ @20°C
Solubility	: Water: Insoluble / Slightly miscible
Partition coefficient n-octanol/water (Log Pow)	: No data available

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Viscosity, kinematic	: < 20,5 mm ² /s at 40 °C
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Lower explosive limit (LEL)	: 0,6 vol %
Upper explosive limit (UEL)	: 7 vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified.

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics, benzene <0,1% ((1174522-09-8))

LD50 oral rat	> 5000 mg/kg (OESO 401)
LD50 dermal rabbit	> 3160 mg/kg (OESO 402)
LC50 inhalation rat (mg/l)	> 4,951 g/m ³ (4h, OESO 403)

Tricarbonyl(methylcyclopentadienyl)manganese (12108-13-3)

LD50 oral rat	51,8 mg/kg bodyweight
LD50 dermal rabbit	140 mg/kg bodyweight
LC50 inhalation rat (Vapours - mg/l/4h)	0,076 mg/l/4h

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

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Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.

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Viscosity, kinematic	< 20,5 mm ² /s at 40 °C
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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Harmful to aquatic life with long lasting effects.
Not rapidly degradable	

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics, benzene <0,1% ((1174522-09-8))

LC50 fish	> 1001 mg/l (OECD 203 method)
EC50 Daphnia	> 1000 mg/l (OECD 202 method)
EC50 72h algae (1)	W 1000 mg/l (OECD 201 method)
ErC50 (algae)	1000 mg/l (Pseudokirchneriella subcapitata, EL0, 72h)

Tricarbonyl(methylcyclopentadienyl)manganese (12108-13-3)

LC50 fish	0,21 mg/l
EC50 Daphnia	0,83 mg/l

12.2. Persistence and degradability

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics, benzene <0,1% ((1174522-09-8))

Persistence and degradability	Readily biodegradable.
Biodegradation	80 % (28d)

Tricarbonyl(methylcyclopentadienyl)manganese (12108-13-3)

Biodegradation	60 % (14 days)
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12.3. Bioaccumulative potential

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics, benzene <0,1% ((1174522-09-8))

Partition coefficient n-octanol/water (Log Pow)	5,57 – 6,62
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Tricarbonyl(methylcyclopentadienyl)manganese (12108-13-3)

Partition coefficient n-octanol/water (Log Pow)	3,4 (26°C ; pH 6)
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12.4. Mobility in soil

No additional information available

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12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

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Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Child-resistant fastening : Applicable

Tactile warning : Applicable

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Section	Changed item	Change	Comments
16	Abbreviations and acronyms	Modified	

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LD50	Median lethal dose
LC50	Median lethal concentration
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	Sewage treatment plant
TLM	Median Tolerance Limit
SDS	Safety Data Sheet

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vPvB	Very Persistent and Very Bioaccumulative
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number
EC-No.	European Community number
EN	European Standard
OEL	Occupational Exposure Limit
WGK	Water Hazard Class

Full text of H- and EUH-statements:	
Acute Tox. 2 (Dermal)	Acute toxicity (dermal), Category 2
Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Asp. Tox. 1	Aspiration hazard, Category 1
EUH066	
H301	Toxic if swallowed.
H304	May be fatal if swallowed and enters airways.
H310	Fatal in contact with skin.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.