

Octane Booster

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36/37 Wear suitable protective clothing and gloves.

SECTION 3: Composition/information on ingredients

Mixtures

Chemical characterization

Ignition improver

Hazardous components

EC No.	Chemical name	Quantity
CAS No.	Classification	
Index No.	GHS classification	
REACH No.		
216-653-1	tert-butyl methyl ether, 2-methoxy-2-methylpropane, MTBE	40 - 45 %
1634-04-4	F, Xi R11-38	
603-181-00-X	Flam. Liq. 2, Skin Irrit. 2; H225 H315	
215-535-7	xylene	35 - 40 %
1330-20-7	Xn, Xi R10-20/21-38	
601-022-00-9	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2; H226 H332 H312 H315	
203-625-9	toluene	20 - 25 %
108-88-3	F, Repr. Cat. 3, Xn, Xi R63-11-38-65-67-48/20	
	Flam. Liq. 2, Skin Irrit. 2, Repr. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H225 H315 H361d H336 H373 H304	
	Poly ether amine	1 - 5 %
N/A	N R51-53	
	Aquatic Chronic 2; H411	

Full text of R- and H-phrases: see section 16.

SECTION 4: First aid measures

Description of first aid measures

General information

Move victim to fresh air. Put victim at rest and keep warm.

After inhalation

Move victim to fresh air. Put victim at rest and keep warm.

In case of difficulties of breathing consult physician.

If victim is at risk of losing consciousness, position and transport on their side.

After contact with skin

Take off immediately all contaminated clothing, including underwear and shoes.

After contact with skin, wash immediately with plenty of Water and soap.

Rub in high-fat content cream.

After contact with eyes

Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart.

Consult physician.

After ingestion

Let water be swallowed in little sips (dilution effect). Consult physician.

Most important symptoms and effects, both acute and delayed

Frequently or prolonged contact with skin may cause dermal irritation.

Irritation of eyes: Irritant effect possible.

After ingestion: Harmful: may cause lung damage if swallowed.

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Harmful by inhalation.

Indication of any immediate medical attention and special treatment needed

Warning about danger of aspiration.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media

Extinguishing powder. Sand. alcohol resistant foam. Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons

High power water jet.

Special hazards arising from the substance or mixture

Formation of decomposition products possible.

In case of fire and/or explosion do not breathe fumes.

Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Cool endangered container in case of fire.

Contaminated fire-fighting water must be collected separately.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

In case of fire: Wear self-contained breathing apparatus.

Keep away from sources of ignition. No smoking.

Environmental precautions

Beat down gas/vapours/mist with water spray.

Do not empty into drains or the aquatic environment.

In case of gas being released or leakage into waters, ground or the drainage system, the appropriate authorities must be informed.

Methods and material for containment and cleaning up

Prevent spreading of spillages (e.g. by oil barrier).

Wipe up with absorbent material (eg. cloth, fleece).

SECTION 7: Handling and storage

Precautions for safe handling

Advice on safe handling

Closed devices. Vapours / aerosols must be extracted by suction immediately at point of origin.

Avoid contact with skin and eyes.

Advice on protection against fire and explosion

Keep away from sources of ignition. No smoking. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

Further information on storage conditions

Packaging materials: metal.

SECTION 8: Exposure controls/personal protection

Control parameters

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Exposure limits (EH40)

CAS No.	Chemical name	ml/m ³	mg/m ³	F/ml	Category	Origin
1634-04-4	Methyl-tert-butyl ether	25	92		TWA (8 h)	WEL
		75	275		STEL (15 min)	WEL
108-88-3	Toluene	50	191		TWA (8 h)	WEL
		100	384		STEL (15 min)	WEL
1330-20-7	Xylene, o-, m-, p- or mixed isomers	50	220		TWA (8 h)	WEL
		100	441		STEL (15 min)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No.	Chemical name	Parameter	Value	Test material	Sampling time
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid	650 mmol/mol	urine	Post shift

Exposure controls

Protective and hygiene measures

When using do not eat, drink or smoke.

"Wash hands when done working with material; at breaks, lunch, shift changes, etc."

Respiratory protection

In case of accumulation of fumes/aerosols, provide adequate ventilation.

In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection

Tested protective gloves are to be worn: Butyl rubber. (EN 374)

Eye protection

Wear tightly sealed safety glasses against possible splashes into the eyes. (EN 166)

Skin protection

Wear suitable solvent-proof protective clothing according to EN 465.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state: liquid
Colour: colored
Odour: aromatic

Test method

Changes in the physical state

Flash point: -5 °C

Lower explosion limits:

Upper explosion limits:

Density (at 20 °C): 0.78-0.82 g/cm³

Water solubility:
(at 20 °C) insoluble

Solubility in other solvents: Organic solvents

SECTION 10: Stability and reactivity

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Conditions to avoid

Only use material in places where open light, fire and other sources of ignition can be kept away.

Incompatible materials

Oxidizing agents. acid, concentrated. Alkalis (alkalis), concentrated.

Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO₂).

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

LD50(oral, rat) > 2000 mg/Kg.

CAS No.	Chemical name				
	Exposure routes	Method	Dose	Species	h
1634-04-4	tert-butyl methyl ether, 2-methoxy-2-methylpropane, MTBE				
	Acute oral toxicity	LD50	>2000 mg/kg	rat.	
	Acute dermal toxicity	LD50	>2000 mg/kg	rat.	
1330-20-7	xylene				
	Acute oral toxicity	LD50	4300 mg/kg	rat.	
	Acute dermal toxicity	LD50	3200 mg/kg	Rabbit.	
108-88-3	toluene				
	Acute oral toxicity	LD50	5300-5910 mg/kg	rat.	
	Acute dermal toxicity	LD50	12124 mg/kg	Rabbit.	
N/A	Poly ether amine				
	Acute oral toxicity	LD50	>5000 mg/kg	rat.	
	Acute dermal toxicity	LD50	>2000 mg/kg	Rabbit.	

Irritation and corrosivity

After skin contact: Frequently or prolonged contact with skin may cause dermal irritation.

Irritation of eyes: Irritant effect possible.

After ingestion:

Harmful: may cause lung damage if swallowed.

SECTION 12: Ecological information

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Toxicity

CAS No.	Chemical name		Method	Dose	Species	h
	Aquatic toxicity					
1634-04-4	tert-butyl methyl ether, 2-methoxy-2-methylpropane, MTBE					
	Acute fish toxicity	LC50	706 mg/l		Pimephales promelas	96
	Acute algae toxicity	ErC50	>800 mg/l		Algae	72
	Acute crustacea toxicity	EC50	651 mg/l		Daphnia magna	48
1330-20-7	xylene					
	Acute fish toxicity	LC50	26,7 mg/l		Pimephales promelas	96
108-88-3	toluene					
	Acute fish toxicity	LC50	24 mg/l		Oncorhynchus mykiss	96
	Acute algae toxicity	ErC50	12 mg/l		Pseudokirchneriella subcapitata	72
	Acute crustacea toxicity	EC50	11,5 mg/l		Daphnia magna	48
N/A	Poly ether amine					
	Acute fish toxicity	LC50	1-10 mg/l		Fish	96
	Acute algae toxicity	ErC50	10-100 mg/l		Algae	72

Persistence and degradability

Product is biodegradable.

Bioaccumulative potential

Swims on the water. Low potential of bio-accumulation.

SECTION 13: Disposal considerations

Waste treatment methods

Advice on disposal

Do not dispose with household waste.
Do not empty into drains or the aquatic environment.
Have to add a Special treatment in compliance with official regulations in contact with approved waste disposal companies and with authorities in charge.
Arrange about the exact waste code with the local waste disposal expert.

Contaminated packaging

Contaminated packing must be completely emptied and can be re-used following appropriate cleaning.
Do not pierce, cut up or weld unclean container. (Explosion hazard.)

SECTION 14: Transport information

Land transport (ADR/RID)

UN number: UN1993
UN proper shipping name: FLAMMABLE LIQUID, N.O.S.
Transport hazard class(es): 3
Packing group: II
Hazard label: 3



Classification code: F1

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Special Provisions: 274 601 640C
 Limited quantity: 1 L
 Transport category: 2
 Hazard-no.: 33
 Tunnel restriction code: D/E

Inland waterways transport

UN number: UN1993
UN proper shipping name: FLAMMABLE LIQUID, N.O.S.
Transport hazard class(es): 3
Packing group: II
 Hazard label: 3



Classification code: F1
 Special Provisions: 274 601 640C
 Limited quantity: 1 L

Marine transport

UN number: UN1993
UN proper shipping name: FLAMMABLE LIQUID, N.O.S.
Transport hazard class(es): 3
Packing group: II
 Hazard label: 3



Marine pollutant: -
 Special Provisions: 274
 Limited quantity: 1 L
 EmS: F-E, S-E

Air transport

UN/ID number: UN1993
UN proper shipping name: FLAMMABLE LIQUID, N.O.S.
Transport hazard class(es): 3
Packing group: II
 Hazard label: 3



Special Provisions: -
 Limited quantity Passenger: 1 L
 IATA-packing instructions - Passenger: 353
 IATA-max. quantity - Passenger: 5 L
 IATA-packing instructions - Cargo: 364
 IATA-max. quantity - Cargo: 60 L

Environmental hazards



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Dangerous for the environment: no

SECTION 15: Regulatory information

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

EU regulatory information

Additional information

Contains:
> 30 % hydrocarbons, aromatic.

National regulatory information

Water contaminating class (D): 2 - water contaminating

SECTION 16: Other information

Full text of R-phrases referred to under sections 2 and 3

- 10 Flammable.
- 11 Highly flammable.
- 20/21 Harmful by inhalation and in contact with skin.
- 38 Irritating to skin.
- 48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
- 51 Toxic to aquatic organisms.
- 53 May cause long-term adverse effects in the aquatic environment.
- 63 Possible risk of harm to the unborn child.
- 65 Harmful: may cause lung damage if swallowed.
- 67 Vapours may cause drowsiness and dizziness.

Full text of H-Statements referred to under sections 2 and 3

- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H332 Harmful if inhaled.
- H336 May cause drowsiness or dizziness.
- H361d Suspected of damaging the unborn child.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H411 Toxic to aquatic life with long lasting effects.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)