



JOHNSEN'S OCTANE BOOST 12 FL.OZ.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 08/25/2014

Version:

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

1.1. Product identifier

Product form : Mixture
Trade name : JOHNSEN'S OCTANE BOOST 12 FL.OZ.
Product code : 4688

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

Use of the substance/mixture : Octane Enhancer

1.3. Details of the supplier of the safety data sheet

Technical Chemical Company
P.O. BOX 139
Cleburne, Texas 76033
T 817-645-6088

1.4. Emergency telephone number

Emergency number : CHEMTREC 24 Hour 1-800-424-9300, 1-703-527-3887 (International)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Flam. Liq. 4 H227

Asp. Tox. 1 H304

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS08

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H227 - Combustible liquid
H304 - May be fatal if swallowed and enters airways

Precautionary statements (GHS-US) :

P210 - Keep away from all ignition sources. - No smoking
P280 - Wear protective gloves, protective clothing, eye protection, face protection
P301+P310 - If swallowed: Immediately call a poison control center, doctor, physician,
P331 - Do NOT induce vomiting
P370+P378 - In case of fire: See Section 5.1 Extinguishing Media
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Distillates (Petroleum), Hydrotreated Light	(CAS No) 64742-47-8	>= 95	Asp. Tox. 1, H304
2-Methoxy-2-Methylpropane	(CAS No) 1634-04-4	1 - 5	Flam. Liq. 2, H225

The exact percentage is a trade secret.

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SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Respiratory arrest: artificial respiration or oxygen. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove the victim into fresh air. If you feel unwell, seek medical advice. Allow victim to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Wash contaminated clothing before reuse. If skin irritation occurs: seek medical attention. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	: Get medical advice/attention. Immediately flush eyes thoroughly with water for at least 15 minutes. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

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

Symptoms/injuries	: If you feel unwell, seek medical advice. Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/injuries after inhalation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/injuries after skin contact	: May cause slight irritation . May cause moderate irritation. Itching. Red skin. Skin rash/inflammation.
Symptoms/injuries after eye contact	: May cause slight eye irritation . May cause severe irritation. Irritation of the eye tissue. Inflammation/damage of the eye tissue. Redness of the eye tissue.
Symptoms/injuries after ingestion	: May be fatal if swallowed and enters airways.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Combustible liquid.
Explosion hazard	: May form flammable/explosive vapor-air mixture.
Reactivity	: On heating: release of harmful/irritant gases/vapours.

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Eliminate ignition sources. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Use protective clothing. Ventilate area. Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.
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6.1.1. For non-emergency personnel

Protective equipment	: Gloves. Safety glasses.
Emergency procedures	: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment	: Dam up the liquid spill. Contain released substance, pump into suitable containers. Plug the leak, cut off the supply.
Methods for cleaning up	: Absorbed substance: shovel into drums. Cover spill with inert material, e.g.: sand, earth, vermiculite or kieselguhr, powdered limestone. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Handle empty containers with care because residual vapors are flammable. Keep away from heat, sparks, open flames, hot surfaces. - No smoking.
- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking.
- Handling temperature : Do not heat or store at temperature above 120 F
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash affected areas thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed.
- Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use. Keep in fireproof place.
- Incompatible products : Oxidizing agent. Strong bases. Strong acids.
- Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

Follow Label Directions.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2-Methoxy-2-Methylpropane (1634-04-4)

USA ACGIH	ACGIH TWA (ppm)	50 ppm
USA ACGIH	ACGIH STEL (ppm)	50 ppm

Distillates (Petroleum), Hydrotreated Light (64742-47-8)

USA ACGIH	ACGIH TWA (ppm)	200 ppm 8 Hours
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8.2. Exposure controls

- Appropriate engineering controls : Provide adequate general and local exhaust ventilation.
- Personal protective equipment : Gloves. Safety glasses. Avoid all unnecessary exposure.



- Materials for protective clothing : neoprene.
- Hand protection : Wear protective gloves.
- Eye protection : Face shield. Chemical goggles or safety glasses.
- Skin and body protection : Protective clothing.
- Respiratory protection : Wear gas mask if concentration in air > exposure limit. Respiratory protection of the dependent type. Wear respiratory protection.
- Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : Liquid.
- Color : Colourless to light yellow.
- Odor : Ethereal. Strong odour.
- Odor threshold : No data available
- pH : N/A
- Relative evaporation rate (butyl acetate=1) : No data available
- Melting point : No data available
- Freezing point : No data available
- Boiling point : > 240 °C
- Flash point : 55 °C
- Auto-ignition temperature : No data available
- Decomposition temperature : No data available

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Flammability (solid, gas)	: No data available
Vapor pressure	: N/A
Relative vapor density at 20 °C	: No data available
Relative density	: 0.798
Solubility	: Poorly soluble in water. Water: < 2 % Slight
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: 1.7 cSt @ 40 deg C
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: 0.7 - 6 vol % Estimated

9.2. Other information

VOC content : 2.5 %

SECTION 10: Stability and reactivity

10.1. Reactivity

On heating: release of harmful/irritant gases/vapours.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7). Combustible liquid. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

May react violently with oxidants. Not established.

10.4. Conditions to avoid

Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

10.5. Incompatible materials

Oxidizing agent. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Toxic fume. . Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

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LC50 inhalation rat (ppm)	23576 ppm/4h Methyl tert-butyl ether (MTBE)
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2-Methoxy-2-Methylpropane (1634-04-4)

LD50 oral rat	4000 mg/kg (Rat)
LD50 dermal rat	> 6800 mg/kg (Rat)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	85 mg/l/4h (Rat)
LC50 inhalation rat (ppm)	23576 ppm/4h (Rat)

Distillates (Petroleum), Hydrotreated Light (64742-47-8)

LD50 oral rat	> 5000 mg/kg body weight
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5.28 mg/l/4h Based on lack of mortality and systemic effects

Skin corrosion/irritation	: Not classified pH: N/A
Serious eye damage/irritation	: Not classified pH: N/A
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

2-Methoxy-2-Methylpropane (1634-04-4)

IARC group	3
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Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/injuries after skin contact	: May cause slight irritation . May cause moderate irritation. Itching. Red skin. Skin rash/inflammation.
Symptoms/injuries after eye contact	: May cause slight eye irritation . May cause severe irritation. Irritation of the eye tissue. Inflammation/damage of the eye tissue. Redness of the eye tissue.
Symptoms/injuries after ingestion	: May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1. Toxicity

2-Methoxy-2-Methylpropane (1634-04-4)	
LC50 fish 1	672 - 706 mg/l (96 h; Pimephales promelas)
LC50 other aquatic organisms 1	2500 mg/l (Rana sp.; Young)
EC50 Daphnia 1	651 mg/l (48 h; Daphnia magna)
LC50 fish 2	1000 mg/l (48 h; Leuciscus idus)
Threshold limit other aquatic organisms 1	2500 mg/l (Rana sp.; Young)
Threshold limit algae 1	470 mg/l (72 h; Scenedesmus subspicatus)

12.2. Persistence and degradability

JOHNSEN'S OCTANE BOOST 12 FL.OZ.	
Persistence and degradability	Not established.

2-Methoxy-2-Methylpropane (1634-04-4)	
Persistence and degradability	Not readily biodegradable in water.

Distillates (Petroleum), Hydrotreated Light (64742-47-8)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

JOHNSEN'S OCTANE BOOST 12 FL.OZ.	
Bioaccumulative potential	Not established.

2-Methoxy-2-Methylpropane (1634-04-4)	
BCF fish 1	1.5 (672 h; Cyprinus carpio)
Log Pow	1.06 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

Distillates (Petroleum), Hydrotreated Light (64742-47-8)	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

2-Methoxy-2-Methylpropane (1634-04-4)	
Surface tension	0.020 N/m (20 °C)

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.
Additional information	: Handle empty containers with care because residual vapors are flammable.
Ecology - waste materials	: Avoid release to the environment. Hazardous waste due to toxicity.

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SECTION 14: Transport information

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

US DOT (ground): NA1993, Combustible liquid, n.o.s. (Petroleum Distillates, MTBE), 3, III, Limited Quantity
ICAO/IATA (air): Not Regulated,
IMO/IMDG (water): Not Regulated,
Special Provisions: IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).
T1 - 1.5 178.274(d)(2) Normal..... 178.275(d)(2)
T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Combustible liquid, n.o.s. (Petroleum Distillates, MTBE)
Department of Transportation (DOT) Hazard Classes : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
DOT Symbols : D - Proper shipping name for domestic use only, or to and from Canada,G - Identifies PSN requiring a technical name
Packing group (DOT) : III - Minor Danger
DOT Special Provisions (49 CFR 172.102) : IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).
T1 - 1.5 178.274(d)(2) Normal..... 178.275(d)(2)
T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
DOT Packaging Bulk (49 CFR 173.xxx) : 241

14.3. Additional information

Other information : No supplementary information available.

Overland transport

No additional information available

Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 220 L

SECTION 15: Regulatory information

15.1. US Federal regulations

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SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Fire hazard Delayed (chronic) health hazard
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2-Methoxy-2-Methylpropane (1634-04-4)

SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Fire hazard Immediate (acute) health hazard
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Distillates (Petroleum), Hydrotreated Light (64742-47-8)

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
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15.2. International regulations

CANADA

JOHNSEN'S OCTANE BOOST 12 FL.OZ.

WHMIS Classification Class B Division 3 - Combustible Liquid

Distillates (Petroleum), Hydrotreated Light (64742-47-8)

WHMIS Classification Uncontrolled product according to WHMIS classification criteria

EU-Regulations

No additional information available

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

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

R10

Full text of R-phrases: see section 16

15.2.2. National regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information

Other information : None.

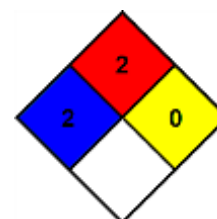
Full text of H-phrases: see section 16:

Asp. Tox. 1	Aspiration hazard Category 1
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 4	Flammable liquids Category 4
H225	Highly flammable liquid and vapor
H227	Combustible liquid
H304	May be fatal if swallowed and enters airways

NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard : 2 - Must be moderately heated or exposed to relatively high temperature before ignition can occur.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 2 Moderate Hazard

Physical : 0 Minimal Hazard

Personal Protection : B

SDS US (GHS HazCom 2012) - TCC

The Supplier identified in Section 1 of this MSDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product

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