

Material Safety Data Sheet



Unleaded Race Fuel with MTBE

1. Product and company identification

Product name	: Unleaded Race Fuel with MTBE
Material uses	: Fuel.
Supplier/Manufacturer	: VP Racing Fuels 7124 Richter Rd Elmendorf, TX 78112
Validation date	: 06/12/2009
Responsible name	: Atrion Regulatory Services, Inc.
In case of emergency	: CHEMTREC, U.S. : 1-800-424-9300 International: +1-703-527-3887

2. Hazards identification

Physical state	: Liquid.
Odor	: Characteristic.
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Emergency overview	: WARNING! FLAMMABLE LIQUID AND VAPOR. CAUSES EYE IRRITATION. HARMFUL OR FATAL IF SWALLOWED. CAN ENTER LUNGS AND CAUSE DAMAGE. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE. POSSIBLE CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER, BASED ON ANIMAL DATA.

Flammable liquid. Irritating to eyes. Aspiration hazard if swallowed. Can enter lungs and cause damage. Keep away from heat, sparks and flame. Avoid exposure - obtain special instructions before use. Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Contains material that can cause target organ damage. Contains material which may cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Potential acute health effects

Inhalation	: No known significant effects or critical hazards.
Ingestion	: Aspiration hazard if swallowed. Can enter lungs and cause damage.
Skin	: May cause skin irritation.
Eyes	: Irritating to eyes.

Potential chronic health effects

Chronic effects	: Contains material that can cause target organ damage.
Carcinogenicity	: Contains material which may cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.
Target organs	: Contains material which causes damage to the following organs: kidneys, liver, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

Over-exposure signs/symptoms

Inhalation	: No specific data.
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2. Hazards identification

- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting
- Skin** : No specific data.
- Eyes** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Medical conditions aggravated by over-exposure** : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (section 11)

3. Composition/information on ingredients

United States

Name	CAS number	%
Complex combination of hydrocarbons	86290-81-5	> 49
Tert-butyl methyl ether	1634-04-4	<= 50

Canada

Name	CAS number	%
Complex combination of hydrocarbons	86290-81-5	> 49
Tert-butyl methyl ether	1634-04-4	<= 50

Mexico

Name	UN number	IDLH	Classification				CAS number	%
			H	F	R	Special		
Complex combination of hydrocarbons	UN1993	-	1	3	0	86290-81-5	> 49	
Tert-butyl methyl ether	UN2398	-	1	3	0	1634-04-4	<= 50	

4. First aid measures

- Eye contact** : Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 20 minutes. Get medical attention.
- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention.
- Ingestion** : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.



5 . Fire-fighting measures

- Flammability of the product** : Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
- Extinguishing media**
- Suitable** : Use dry chemical, CO₂, water spray (fog) or foam.
- Not suitable** : Do not use water jet.
- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 . Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Methods for cleaning up**
- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7 . Handling and storage

- Handling** : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and



7 . Handling and storage

equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage

- : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8 . Exposure controls/personal protection

United States

Product name

Complex combination of hydrocarbons

Exposure limits

OSHA PEL 1989 (United States, 3/1989).

STEL: 1500 mg/m³ 15 minute(s).

STEL: 500 ppm 15 minute(s).

TWA: 900 mg/m³ 8 hour(s).

TWA: 300 ppm 8 hour(s).

Tert-butyl methyl ether

ACGIH TLV (United States, 1/2005).

TWA: 50 ppm 8 hour(s). Form: All forms.

TWA: 50 ppm 8 hour(s).

Canada

Product name

Complex combination of hydrocarbons

Exposure limits

CA Alberta Provincial (Canada, 10/2006).

8 hrs OEL: 300 ppm 8 hour(s).

15 min OEL: 500 ppm 15 minute(s).

15 min OEL: 1480 mg/m³ 15 minute(s).

8 hrs OEL: 890 mg/m³ 8 hour(s).

CA Quebec Provincial (Canada, 12/2006).

TWAEV: 300 ppm 8 hour(s).

TWAEV: 890 mg/m³ 8 hour(s).

STEV: 500 ppm 15 minute(s).

STEV: 1480 mg/m³ 15 minute(s).

Tert-butyl methyl ether

ACGIH TLV (Canada, 1/2005).

TWA: 50 ppm 8 hour(s). Form: All forms.

CA Alberta Provincial (Canada, 10/2006).

8 hrs OEL: 144 mg/m³ 8 hour(s).

8 hrs OEL: 40 ppm 8 hour(s).

CA British Columbia Provincial (Canada, 7/2007).

TWA: 50 ppm 8 hour(s).

CA Ontario Provincial (Canada, 3/2007).

TWAEV: 40 ppm 8 hour(s).

CA Quebec Provincial (Canada, 12/2006).

TWAEV: 40 ppm 8 hour(s).

TWAEV: 144 mg/m³ 8 hour(s).

Mexico

Product name

Tert-butyl methyl ether

Exposure limits




ACGIH TLV (United States, 1/2005).

TWA: 50 ppm 8 hour(s). Form: All forms.

TWA: 50 ppm 8 hour(s).

Consult local authorities for acceptable exposure limits.

8 . Exposure controls/personal protection

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
- Engineering measures** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Personal protection**
- Eyes** : Safety glasses.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory** : A respirator is not needed under normal and intended conditions of product use.
- Hands** : Disposable vinyl gloves.
- Personal protective equipment (Pictograms)** :
- 


- HMIS Code/Personal protective equipment** : B
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

- Physical state** : Liquid.
- Flash point** : Closed cup: <22°C (<71.6°F) [Tagliabue.]
- Auto-ignition temperature** : >215°C (>419°F)
- Flammable limits** : Lower: 0.9%
Upper: 36%
- Color** : Various
- Odor** : Characteristic.
- Boiling/condensation point** : >35°C (>95°F)
- Melting/freezing point** : <2°C (<35.6°F)
- Relative density** : 0.625 to 0.88
- Vapor pressure** : 151.6 kPa (1137 mm Hg)
- Vapor density** : >1 [Air = 1]
- Evaporation rate** : <12 (butyl acetate = 1)



10 . Stability and reactivity

- Stability** : The product is stable.
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not swallow.
- Materials to avoid** : Reactive or incompatible with the following materials: oxidizing materials.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Conditions of reactivity** : Extremely flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.
Highly flammable in the presence of the following materials or conditions: heat.

11 . Toxicological information

Acute toxicity

Product/ingredient name	Species	Dose	Result	Exposure
Tert-butyl methyl ether	Rat	>4 g/kg	LD50 Oral	-

- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : Aspiration hazard if swallowed. Can enter lungs and cause damage.
- Skin** : May cause skin irritation.
- Eyes** : Irritating to eyes.

Carcinogenicity

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Complex combination of hydrocarbons	-	2B	-	+	-	-

12 . Ecological information

- Environmental effects** : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Test	Species	Exposure	Result
Tert-butyl methyl ether	-	Fish	96 hours	Acute LC50 672000 ug/L Fresh water

- Other adverse effects** : No known significant effects or critical hazards.

13 . Disposal considerations

- Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.






Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.



14 . Transport information

AERG : 128

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	UN1268	PETROLEUM DISTILLATES, N.O.S.	3	II		-
TDG Classification	UN1268	PETROLEUM DISTILLATES, N.O.S.	3	II		-
Mexico Classification	UN1268	PETROLEUM DISTILLATES, N.O.S.	3	II		-
IMDG Class	UN1268	PETROLEUM DISTILLATES, N.O.S.	3	II		-
IATA-DGR Class	UN1268	PETROLEUM DISTILLATES, N.O.S.	3	II		-

PG* : Packing group

15 . Regulatory information

United States

HCS Classification : Flammable liquid
Irritating material
Carcinogen
Target organ effects

U.S. Federal regulations : **United States inventory (TSCA 8b)**: All components are listed or exempted.
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: Complex combination of hydrocarbons; Tert-butyl methyl ether
SARA 311/312 MSDS distribution - chemical inventory - hazard identification
Complex combination of hydrocarbons: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Tert-butyl methyl ether: Fire hazard
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: No products were found.
Clean Air Act (CAA) 112 accidental release prevention No products were found.
Clean Air Act (CAA) 112 regulated flammable substances No products were found.
Clean Air Act (CAA) 112 regulated toxic substances No products were found.

SARA 313

Form R - Reporting requirements : **Product name** : Tert-butyl methyl ether
CAS number : 1634-04-4
Concentration : 6 - 50



15 . Regulatory information

Supplier notification : Tert-butyl methyl ether 1634-04-4 6 - 50

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

- State regulations** :
- Connecticut Carcinogen Reporting**: None of the components are listed.
 - Connecticut Hazardous Material Survey**: None of the components are listed.
 - Florida substances**: None of the components are listed.
 - Illinois Chemical Safety Act** None of the components are listed.
 - Illinois Toxic Substances Disclosure to Employee Act** None of the components are listed.
 - Louisiana Reporting**: None of the components are listed.
 - Louisiana Spill**: None of the components are listed.
 - Massachusetts Spill**: None of the components are listed.
 - Massachusetts Substances**: The following components are listed: Complex combination of hydrocarbons;Methyl tert-butyl ether
 - Michigan Critical Material**: None of the components are listed.
 - Minnesota Hazardous Substances**: None of the components are listed.
 - New Jersey Hazardous Substances**: The following components are listed: Complex combination of hydrocarbons;Methyl tert-butyl ether
 - New Jersey Spill**: None of the components are listed.
 - New Jersey Toxic Catastrophe Prevention Act**: None of the components are listed.
 - New York Acutely Hazardous Substances**: The following components are listed: Methyl tert-butyl ether
 - New York Toxic Chemical Release Reporting**: None of the components are listed.
 - Pennsylvania RTK Hazardous Substances**: The following components are listed: Methyl tert-butyl ether
 - Rhode Island Hazardous Substances**: None of the components are listed.

California Prop. 65

WARNING: This product contains a chemical or chemicals known to the state of California to cause birth defects (or other reproductive harm). Avoid breathing exhaust fumes and vapors. Do not use products in an indoor facility or in any facility without adequate ventilation.

Canada

- WHMIS (Canada)** :
- Class B-2: Flammable liquid
 - Class D-2A: Material causing other toxic effects (Very toxic).
 - Class D-2B: Material causing other toxic effects (Toxic).



- Canadian lists** :
- CEPA Toxic substances**: None of the components are listed.
 - Canadian ARET**: None of the components are listed.
 - Canadian NPRI**: The following components are listed: Methyl tert-butyl ether
 - Alberta Designated Substances**: None of the components are listed.
 - Ontario Designated Substances**: None of the components are listed.
 - Quebec Designated Substances**: None of the components are listed.

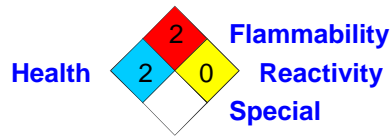
15 . Regulatory information

Canada inventory : Canada inventory: All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Mexico

Classification :



International regulations

International lists : This product, (and its ingredients) is (are) listed on national inventories, or is (are) exempted from being listed, in Australia (AICS), in Europe (EINECS/ELINCS), in Korea (TCCL), in Japan (METI), in the Philippines (RA6969).

16 . Other information

Label requirements : FLAMMABLE LIQUID AND VAPOR. CAUSES EYE IRRITATION. HARMFUL OR FATAL IF SWALLOWED. CAN ENTER LUNGS AND CAUSE DAMAGE. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE. POSSIBLE CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER, BASED ON ANIMAL DATA.

Hazardous Material Information System (U.S.A.) :

Health	*	2
Fire hazard		2
Physical Hazard		0
Personal protection		B

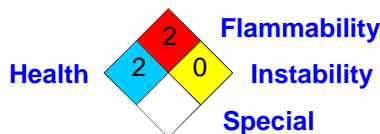
HAZARD RATINGS

- 4- Extreme
- 3- Serious
- 2- Moderate
- 1- Slight
- 0- Minimal

See section 8 for more detailed information on personal protection.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) :



References

: ANSI Z400.1, MSDS Standard, 2004. - Manufacturer's Material Safety Data Sheet. - 29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG. - Canada Gazette Part II, Vol. 122, No. 2. Registration SOR/88-64, 31 December 1987. Hazardous Products Act "Ingredient Disclosure List" - Canadian Transport of Dangerous Goods, Regulations and Schedules, Clear Language version 2005. - Official Mexican Standards NOM-018-STPS-2000 and NOM-004-SCT2-1994.

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Version : 2



16 . Other information

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.