SAFETY DATA SHEET

1. Product Identification

Champion Brands, LLC
1001 Golden Drive
Clinton, MO 54735
(660) 885-8151

Product line:	**Champion® Octane Booster**
Products:	4279
CAS:	Mixture
Synonyms:	MMT® Octane booster with dispersant
Recommended use:	Fuel additive
Restrictions:	Do not use near heat/sparks/open flames.
Created:	11 June 2012
Revised:	13 March 2018
Emergency phone:	CHEMTREC: (+1) 800-424-9300

2. Hazards Identification

Appearance:	Clear, pale yellow liquid
Odor:	Mild herbaceous odor
Classification(s):	Flammable Liquid, Category 3 Aspiration Hazard, Category 1 Skin Corrosion/Irritation, Category 2 Specific Target Organ Toxicity, Category 2 (Single Exposure) Aquatic Toxicity (Chronic), Category 3
Target organs:	Blood, central nervous system (CNS), eyes, gastrointestinal tract, heart, immune system, kidneys, liver, lungs, respiratory tract and skin
Symbol(s):	
Signal Word:	**DANGER**
Hazard Statement(s):	Flammable liquid and vapor. May be fatal if swallowed and enters airways. Causes skin irritation. May cause damage to organs (blood, CNS, eyes, gastrointestinal tract, heart, immune system, kidneys, liver, lungs, respiratory tract and skin). Harmful to aquatic life with long-lasting effects

Other hazard(s): Repeated exposure may cause dryness of the skin. Contains acutely toxic ingredients below the threshold for GHS classification. Contains eye irritants at concentrations below the threshold for GHS classification.

Precaution(s): Keep away from heat/sparks/open flames/hot surfaces – no smoking. Do not breathe mist/vapors/spray. Use in a well ventilated area. Wear protective gloves/protective clothing. Do no ingest. IF SWALLOWED: Do NOT induce vomiting. Get immediate medical attention

.

Disposal: Keep out of waterways. Check local, national, and international regulations for proper disposal

3. Composition/Information on Ingredients

Hazardous Ingredients:

Component	*CAS No.*	*Conc (wt%)*
Naphtha (petroleum), hydrotreated heavy	64742-48-9	99
Poly(oxyalkylene) alkaryl ether	Proprietary	<1
Polyolefin alkyl phenol alkyl amine	Proprietary	<1
Alkyl benzenes	Mixture	<1
Methylcyclopentadienyl manganese tricarbonyl	12108-13-3	<1
Manganese cyclopentadienyl tricarbonyl	12079-65-1	<1

4. First Aid Measures

Eyes Remove contact lenses, if worn. Rinse with running water for at least 15 minutes, lifting upper and lower eyelids occasionally. Seek medical attention if irritation persists.

Skin Remove affected clothing and launder before reuse. Wash affected area for at least 15 minutes with soap and running water. Seek medical attention if persistent irritation occurs. Prolonged or repeated exposure may cause defatting of the skin – symptoms include redness, dryness, cracking

Inhalation Remove exposed person to fresh air immediately. Restore or assist breathing, if necessary. Get medical attention if symptoms appear

Ingestion If swallowed DO NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to minimize the chance

of aspiration. Get immediately medical attention. Call poison control if medical attention is not immediately available.

Additional Info
Specific Treatments Note to physician: High potential for chemical pneumonitis! Consider gastric lavage with protected airway, or administration of activated charcoal. Call poison control for specific guidance.

5. Fire Fighting Measures

NFPA (estimated): **Health – 2 Fire – 2 Instability – 0**

Flash Point 38°C / 100°F

Extinguishing Media Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Do not discharge extinguishing waters into the aquatic environment.

Unsuitable Media Do not use water jet

Firefighting Procedures: Keep nearby containers cool with water spray.

Unusual Hazards Low flash point – significant potential for flash fires. Material will flow over water pools and may cause fire to spread. Incomplete combustion can produce carbon monoxide.

6. Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures: Flammable liquid – can cause flash fires from a significant distance to a source of ignition. Keep unnecessary personnel away. Wear appropriate personal protective equipment for emergency. Ventilate if released in a confined area. Eliminate sources of ignition if it is safe to do so.

Environmental precautions: Avoid release to the environment. Prevent from entering into soil, ditches, sewers, waterways or groundwater

Methods for removal: Use an explosion-proof pump to remove bulk liquid. Residual liquid can be absorbed on inert material or evaporated with adequate ventilation. **Use only non-sparking tools**.

7. Handling and Storage

Max. Handling Temp: Do not store or handle at elevated temperatures. See Section 5 for flammability and Section 10 for chemical stability

Procedures: Use only in a well ventilated area. Avoid breathing vapors. Keep containers closed when not in use. Use appropriate containment to avoid environmental contamination. Vapors are heavier than air and will tend to accumulate in low areas. Avoid sources of ignition and use non-sparking tools. Avoid use in confined areas without adequate ventilation. Areas of inadequate ventilation could contain concentrations high enough to cause eye irritation, headaches, or nausea. Avoid breathing dust, fume, gas, mist, vapors, or spray. Wash thoroughly after handling. Launder contaminated clothing before reuse. Empty container contains product residue which may exhibit hazards of the product. Do no weld, heat, or pressurize empty containers. Do not re-use containers. Dispose of packaging or containers in accordance with local, regional, national, and international regulations. Store away from strong oxidizers

Max Store Temp: Do not store or handle at elevated temperatures.

Unsuitable Materials: Avoid prolonged contact with natural, butyl or nitrile rubbers.

Other: Store in a diked area and prevent discharge into the aquatic environment

8. Exposure Controls/Personal Protection

Exposure Limits

US
Guidelines by component

Hydrotreated Heavy Naphtha
PEL/TWA: 100 ppm
Methylcyclopentadienyl Manganese Tricarbonyl
TWA: 0.2mg/m3; 8 hrs
Manganese cyclopentadienyl tricarbonyl
TWA: 0.1mg/m3; 8 hrs
Trimethyl benzenes
TWA 25 ppm
Xylene
TWA 50 ppm

Cumene
TWA 50 ppm

Other Exposure Limits: Not determined

Engineering Controls: Use in a well ventilated area. Local and general ventilation should keep methanol vapor concentration below permissible limits. Where exposure potential exceeds recommended limits, use a NIOSH/OSHA approved supplied air respirator as recommended. Vapors are heavier than air and will tend to accumulate in low-lying areas.

Personal Protective Equipment
Respiratory (based on methanol concentrations):
<1000 ppm: half-mask organic vapor respirator
<5000 ppm: full-face organic vapor respirator or supplied air respirator
>5000 ppm: self-contained breathing apparatus with positive pressure

Eye: Face shield or chemical splash goggles when splashing may occur. If possible, remove contact lenses before handling

Gloves: Use neoprene or viton gloves. Nitrile gloves can be used – but prolonged contact may cause the rubber to degrade

Clothing: Use chemical resistant pants and jackets

Other: Locate the nearest eyewash station and safety shower before handling this product. Limit exposure whenever possible. Consider flammability and always use non-sparking tools.

Hygiene: Wash thoroughly after handling this product.

9. Physical and Chemical Properties

Appearance	Clear, pale yellow liquid
Odor	Mild herbaceous odor
Odor threshold	Not determined
pH	Not determined
Melting Point	-26°C / -15°F
Initial Boiling Pt	149°C / 300°F
Flash Point	37°C / 100°F
Evaporation Rate	0.25 (where ethyl ether = 1)
Upper Flammable Lm	6% vol. in air
Lower Flammable Lm	0.7% vol. in air
Explosive Data	Vapors of this product may form explosive mixtures with air
Vapor Pressure	Not determined

Vapor Density	5 (where air = 1)
Volatile Organics	99%
Density	0.8 mg/cu. cm @15.6°C
Solubility	Negligible
K_{ow}	Not determined
Viscosity	1 mm/s^2 @ 40°C / 105°F
Autoignition Point	282°C **/** 540°F
Decomposition Temp	Not determined

10. Stability and Reactivity

Stability	Material is normally stable at ambient temperatures and pressures. Has low vapor pressure – vapors may form explosive mixtures with air!
Decomposition Temp	Not determined. Stable under normal conditions of use
Incompatibility	Keep away from strong oxidizers. Contact with these materials may cause violent or explosive reactions.
Polymerization	Will not occur
Thermal Decomposition	Oxides of manganese. Combustion products highly dependent on conditions. Produces carbon oxides. Lower oxygen environments are likely to produce more harmful particulate carbon, polyaromatic heterocycles, carbon monoxide and other organic compounds.
Conditions to Avoid	Flammable liquid and vapor – keep away from strong oxidizers as well as heat/sparks/open flames/hot surfaces.

11. Toxicological Information

- Acute Exposure –

Eye Irritation	Not expected to cause damage to the eyes. May cause minor irritation or discomfort
Skin Irritation	Expected to irritate the skin. Prolonged exposure may cause drying, cracking, and redness of the skin.
Respiratory Irritation	May cause chemical pneumonitis and severe irritation if material enters airways. May be fatal
Dermal Toxicity	Expected to be of low toxicity in contact with skin. Based on concentrations of components
Inhalation Toxicity	Expected to be of low toxicity if inhaled. Based on concentrations of components.
Oral Toxicity	Expected to be of low toxicity if ingested. Based on concentrations of components.
Aspiration Hazard	This product has a very low viscosity and may be fatal if aspirated into the airways. Do NOT induce vomiting, as this increases risk of aspiration. Aspiration may be fatal.

- Chronic Exposure –

Chronic Toxicity	This product may cause dryness or defatting of the skin, dermatitis, or may aggravate existing skin conditions.
Carcinogenicity	This product and its components are NOT listed by the IARC, NTP, ACGIH, or OSHA as carcinogens. An increased skin tumor incidence has been observed in experimental animals; the significance of this finding to man is unknown (Stoddard Solvent IIC)
Mutagenicity	Available information does not suggest that this product is a germ cell mutagen
Reproductive Toxicity	Available information does not suggest that this product is a reproductive toxin.
Teratogenicity	Available information does not suggest that this product is a teratogen

- Additional Information –

Target organ toxicity	Contains materials which may cause damage to the following organs: blood, kidneys, lungs, heart, brain, immune system, central nervous system (CNS), testes, liver, gastrointestinal tract, upper respiratory tract.
Synergistic effects	No data available
Pharmacokinetics	No data available

12. Ecological Information

- Environmental Toxicity –

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

- Environmental Fate –

Biodegradation	Expected to be readily biodegradable. Oxidizes rapidly by photo-chemical reactions in the air. Manganese compounds in this product rapidly photolyze in water.
Bioaccumulation	Adheres to soil – has the potential to bioaccumulate
Soil Mobility	Adsorbs to soil and has low mobility under normal conditions
Other Effects	Floats on water and produces a sheen – very mobile in the aquatic environment

13. Disposal Considerations

Disposal Considerations

All disposal practices must be in accordance with local, regional, national, and international regulations. Store material for disposal as indicated in Section 7. Disposal by controlled incineration or recycling may be acceptable – review applicable regulations or regulatory bodies before making disposal decisions.

Contaminated Containers or Packaging

Empty containers are likely to contain flammable vapors or explosive mixtures of vapor and air. Do NOT weld, cut, or grind empty containers. Send to reconditioner or metal reclaimer if possible. Dispose of in accordance with local, regional, national, and international regulations

14. Transportation Information

Description shown may not apply to all shipping situations. Consult applicable shipping codes to determine any additional shipping requirements

US DOT	
UN No	1268
UN Proper Name	Petroleum products, n.o.s. (Flammable Liquid)
UN Class	3
Packing Group	III
Marine Pollutant	No
IMDG	Not Determined
ICAO/IATA	Not Determined

15. Regulatory Information

- Global Chemical Inventories/Regulations –

USA	All components of this material are on the US TSCA
Other TSCA Reg.	This product is listed on the TSCA as UVCB (Uknown, Variable composition, or Biological) under CAS # 64729-48-9
EU	Components of this product and similar mixtures are registered under REACH. Consult the European Chemicals Agency regarding REACH registration, reporting, and other legal requirements for hydroteated naphtha before importing to the EU.
New Zealand	HSNO approval code HSR001496
Canada	All components of this product are listed on the Canadian Domestic Substances List (DSL).
Canada WHMIS	B3 (Combustible liquid)

- Other U.S. Federal Regulations –

SARA Ext. Haz. Subst.	Methylcyclopentadienyl manganese tricarbonyl (*CAS # 12108-13-3*) is present at a concentration of less than 1% by weight. EHS reportable quantity of this component is 100 lbs.

SARA 311/312

Acute Hazard - YES
Chronic Hazard - YES
Fire Hazard - YES
Reactivity Hazard - NO

SARA Sect. 313

1,2,4-trimethylbenzene	<1%
Xylene	<1%
Cumene	<1%
Methylcyclopentadienyl manganese tricarbonyl	<1%

CERCLA Haz. Sub. Xylene (100lbs); Cumene (5000lbs); Ethylbenzene (1000lbs); Napthalene (100lbs); Styrene (1000lbs); Toluene (1000lbs); Benzene (10lbs); p-Xylene (100lbs); Acetaldehyde (1000lbs); Furan (100lbs); Propylene oxide (100lbs)

- State Regulations –

CA Prop 65 This product contains trace amounts of ethylbenzene, naphthalene, toluene, benzene, furan, propylene oxide, acetaladhyde – chemicals which are known to the State of California to cause cancer, birth defects, or other reproductive harm

Right to Know Component	***Right to Know States***
Naptha (petroleum), heavy hydrotreated (CAS # 64742-48-9)	NJ, FL, PA, MA
Methylcyclopentadienyl manganese tricarbonyl (CAS # 12108-13-3)	NJ, PA, MA
1,2,4-Trimethylbenzene (CAS # 95-63-6)	NJ, PA, MA
1,3,5-Trimethylbenzene (CAS # 108-67-8)	NJ, PA, MA
Propylbenzene (CAS # 103-65-1)	NJ, PA, MA
Xylene (CAS # 100-41-4)	NJ, PA, MA
2-Ethylhexanol (CAS # 104-76-7)	NJ, PA, MA
Cumene (CAS # 98-82-8)	NJ, PA, MA

- Other –

Not determined

16. Other Information

Revision updates may be in many sections and the MSDS should be read in its entirety.
Prepared according to the UN Globally Harmonized System for the Classification and Labeling of Chemicals (GHS) by Champion LLC, 1001 Golden Drive, Clinton, Missouri 64735.

Disclaimer: The information presented herein has been compiled from sources considered to be dependable and is accurate to the best knowledge of Champion Brands, L.L.C. Champion Brands, L.L.C., makes no warranty whatsoever expressed or implied of merchantability or fitness for the particular purpose, regarding the accuracy of such data or the results to be obtained from the use thereof. Champion Brands, L.L.C., assumes no legal responsibility for use or reliance upon this data. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.