



SAFETY DATA SHEET

1. Product Identification

AUTOMOTIVE REDISTRIBUTION CENTER c/o Balkamp Inc
2601 Stout Heritage Parkway
Plainfield, IN 46168
(317) 244-7241

Product line: MAC'S® Octane Treatment
Products: 0104
CAS: Mixture
Synonyms: Gasoline additive
Recommended use: Gasoline additive
Restrictions: Do not use near heat/sparks/open flames.
Created: 10 August 2012
Revised: 23 October 2020
Emergency phone: CHEMTREC: (+1) 800-424-9300

2. Hazards Identification

Appearance: Clear, colorless liquid
Odor: Mild hydrocarbon odor
Classification(s): Flammable Liquid, Category 3
Aspiration Hazard, Category 1
Skin Corrosion/Irritation, Category 2
Serious Eye Damage/Eye Irritation, Category 2
Single Target Organ Toxicity (Single-Exposure), Category 2
Aquatic Toxicity (Chronic), Category 3
Target organs: *Blood, central nervous system, 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. Causes serious eye irritation. May cause damage to organs (*blood, central*

nervous system, eyes, gastrointestinal tract, heart, immune system, kidneys, liver, lungs, respiratory tract, skin). Harmful to aquatic life with long-lasting effects

Other hazard(s): Repeated exposure may cause dryness of the skin

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/glasses/clothing. IF ON SKIN: Remove contaminated clothing and wash area immediately with soap and water. Do not 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	90 – 99
Poly(oxyalkylene) alkaryl ether	Proprietary	1 – 2
Polyolefin alkyl phenol alkyl amine	Proprietary	1 – 2
1,2,4-trimethylbenzene	95-63-6	< 1
1,3,5-trimethylbenzene	108-67-8	< 1
N-propylbenzene	103-65-1	< 1
Xylene	1330-20-7	< 1
2-ethylhexanol	104-76-7	< 1
Cumene	98-82-8	< 1
1,2,3-trimethylbenzene	526-73-8	< 1
Alkyl benzene	Proprietary	< 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. Get medical attention.

Inhalation	Remove exposed person to fresh air immediately. Restore or assist breathing, if necessary. Get medical attention if breathing is slow or difficult.
Ingestion	If swallowed DO NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to minimize the chance of aspiration. If fever, shortness of breath, congestion, coughing or wheezing occurs, get immediate medical attention.
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 – 1** **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 not 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 (CAS # 64742-48-9)

PEL/TWA: 100 ppm (ACGIH)

1,2,4-trimethylbenzene (CAS # 95-63-6)

TWA: 25 ppm (ACGIH)

1,3,5-trimethylbenzene (CAS # 108-67-8)

TWA: 25 ppm (ACGIH)

Xylene (CAS # 1330-20-7)

TWA: 100 ppm (ACGIH)
 STEL: 150 ppm (ACGIH)
 TWA: 100 ppm (US OSHA)

Cumene (CAS # 98-82-8)

TWA: 50 ppm (ACGIH)
 TWA: 50 ppm (ACGIH)

1,2,3-trimethylbenzene (CAS # 526-73-8)

TWA: 25 ppm (ACGIH)

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: Use a positive-pressure supplied-air NIOSH approved respirator when used in confined spaces or where engineering controls are not sufficient to limit exposure to below recommended limits

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, colorless to straw-colored liquid
Odor	Amine-like 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	100%
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	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	Expected to be irritating to the eyes based on information on ingredients
Skin Irritation	Expected to be irritating to the skin based on information on ingredients
Respiratory Irritation	May cause chemical pneumonitis and severe irritation if material enters airways. Aspiration of this material may be fatal.
Dermal Toxicity	Based on component data, expected to have minimal toxicity
Inhalation Toxicity	Based on component data, expected to have minimal toxicity

Oral Toxicity	Based on component data, expected to have minimal toxicity
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	<i>Xylene is listed as a class A4 carcinogen by the ACGIH.</i> Concentration of Xylene in this product is less than 1%.
	Solvent and other components of this product 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. At extremely high exposure levels (toxic to the mother), xylene has shown developmental effects in animal studies.
Teratogenicity	Available information does not suggest that this product is a teratogen
	- Additional Information -
Target organ toxicity	Product contains trimethylbenzenes which have shown blood effects in laboratory animals after long-term inhalation exposure. May be toxic to the central nervous system, liver, kidneys, and blood system by inhalation. Symptoms may include irregular or rapid heartbeat. Xylene vapour has caused occupational skin sensitization in humans. Weak carcinogenic liver response observed for components when mice were exposed dermally – effect not observed in rats.
Synergistic effects	No data available
Pharmacokinetics	No data available

12. Ecological Information

- Environmental Toxicity -

Expected to be toxic to aquatic organisms based on calculation and component data

- Environmental Fate -

Biodegradation Some minor components may persist in the environment. Major components expected to be readily biodegradable. Oxidizes rapidly by photo-chemical reactions in the air.

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	1993
UN Proper Name	Combustible liquids, n.o.s. (Petroleum distillates; xylene)
UN Class	Combustible liquid
Packing Group	III
Marine Pollutant	Yes

IMDG UN 1993, Flammable liquid, n.o.s. (petroleum distillates; xylene); 3, III

ICAO/IATA UN 1993, Flammable liquid, n.o.s. (petroleum distillates; xylene); 3, III

15. Regulatory Information

- Global Chemical Inventories/Regulations -

USA	All components of this material are on the US TSCA or exempted
Other TSCA Reg.	This product is listed on the TSCA as UVCB (Unknown, Variable composition, or Biological) under CAS # 64729-48-9
EU	Components of this product and similar mixtures are registered under REACH or exempted. Consult the European Chemicals Agency regarding REACH registration,

reporting, and other legal requirements for hydroreated 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), D-2B

- Other U.S. Federal Regulations -

SARA Ext. Haz. Subst. No chemicals in this product are listed on the SARA 302 Extremely Hazardous Substances list.

SARA 311/312

Acute Hazard - YES

Chronic Hazard - YES

Fire Hazard - YES

Reactivity Hazard - NO

SARA Sect. 313

1,2,4-trimethylbenzene (1 – 3% w/w)

Xylene (< 1% w/w)

Cumene (< 1% w/w)

CERCLA Haz. Sub. Xylene (100lbs), cumene (5000lbs), ethylbenzene (1000lbs), naphthalene (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 the following chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm: *ethylbenzene, naphthalene, toluene, benzene, furan, propylene oxide, acetaldehyde*

Right to Know Component	Right to Know States
Naptha (petroleum), heavy hydrotreated (CAS # 64742-48-9)	NJ, FL, PA, MA
1,2,4-trimethylbenzene (CAS # 95-63-6)	NJ, PA, MA
1,3,5-trimethylbenzene (CAS # 108-67-8)	NJ, PA, MA
n-propylbenzene (CAS # 103-65-1)	NJ, PA, MA
Xylene (CAS # 1330-20-7)	NJ, PA, MA
2-ethylhexanol (CAS # 104-76-7)	NJ, PA, MA

Cumene (CAS # 98-82-8)	NJ, PA, MA
1,2,4-trimethylbenzene (CAS # 526-73-8)	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).

Disclaimer: The information presented herein has been compiled from sources considered to be dependable and is accurate to the best knowledge. Supplier 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. Supplier 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.