

MATERIAL SAFETY DATA SHEET

XP LAB, INC.

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Xp3G-O

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SECTION 1: PRODUCT IDENTIFICATION & EMERGENCY INFORMATION

PRODUCT NAME: Xp3G-O Octane Improver

EMERGENCY TELEPHONE NUMBERS: XP Lab, Inc. (619)233-3111
Chemtrec USA (800)424-9300
Intl. (703)527-3887

SECTION 2: HAZARDOUS INFORMATION

<u>Controlled</u>	<u>% by weight</u>	<u>CAS #</u>
METHYLCYCLOPENTADIENYL MANGANESE TRICARBONYL SOLVENT NAPHTHA, PETROLEUM, HEAVY AROM.	60.0 - 100.0 %	12108-13-3
1,2,4-TRIMETHYLBENZENE	30.0 - 60.0 %	4742-94-5
NAPHTHALENE	1.0 - 4.9 %	95-63-6
1,3,5-TRIMETHYLBENZENE	1.0 - 4.9 %	91-20-3
	0.1 - 0.5 %	108-67-8

SECTION 3: HEALTH INFORMATION AND PROTECTION

POTENTIAL HEALTH EFFECTS

EYE:

May cause moderate eye irritation which may be slow to heal. Vapors may irritate eyes.
May cause moderate corneal injury.

SKIN:

Prolong or repeated exposure may cause skin irritation. A single prolonged exposure may result in the material being absorbed in harmful amounts. Excessive exposure may cause hemolysis. Repeated minor exposure may result in absorption of harmful amounts.

INGESTION:

Single dose oral toxicity is considered to be moderate.
Small amounts swallowed incidental are not likely to cause injury.
Swallowing larger amounts may cause injury.

INHALATION:

A single prolonged excessive inhalation exposure may cause adverse effect. Excessive exposure may cause irritation in the upper respiratory tract.

TERATOLOGY (BIRTH DEFECTS):

Birth defects are unlikely. Exposures having no effect in the mother should have no effect on the fetus. Did not cause birth defects in animals.

SECTION 4: FIRST AID

EYE CONTACT

Irrigate with flowing water immediately and continuously for 15 minutes. If irritation persists, get medical attention.

SKIN CONTACT:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated cloths and shoes. Call physician if irritation continues.

INGESTION:

If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Consult medical personnel.

INHALATION:

Remove the affected victim from exposure. Remove to fresh air if effect occur. Consult a physician.

SECTION 5: FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

Flash Point: 143.6° F, 62° C

Method Used: TCC

FLAMMABILITY LIMITS

LFL: 0.0% Vol

UFL: 0.0% Vol

HAZARDOUS COMBUSTION PRODUCTS:

During a *fire*, smoke may contain the original material in addition to toxic and/or irritating compounds.

Violent steam generation or eruption may occur on application of direct water stream to hot liquids. Vapor are heavier than air and may travel a long distance and accumulate in low lying areas. Ignition and/or flashback may occur. Spills of these organic liquids on hot fibrous insulation may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.

EXTINGUISHING MEDIA:

Water fog or fine spray. Carbon Dioxide. Dry chemical. Foam. Alcohol resistant foam (ATC type) are preferred if available. General purpose synthetic foams (including AFFF) or protein foams may function, but much less effectively.
DO NOT use direct water stream.

SECTION 6: SPILL CONTROL PROCEDURE

Eliminate all sources of ignition in vicinity of spill or release vapor to avoid fire or explosion. For large spill, warn public of downwind explosion hazard. Check area with explosion meter before reentering area. Ground and bond all containers and handling equipment. Prevent liquid from entering sewers. Contain spilled liquid with sand or earth. Do not use combustible materials such as sawdust. Recover by pumping (use an explosion proof or hand pump) or with an expert absorbent.

SECTION 7: HANDLING AND STORAGE

HANDLING:

Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers. No smoking, open flames or sources of ignition in handling and storage area. Never use air pressure for transferring product. Electrically ground all equipment.

STORAGE:

Keep containers tightly close when not in use. Store in carbon steel, stainless steel or Teflon containers.

SECTION 8: PERSONAL PROTECTION

EYE AND FACE PROTECTION:

Use chemical goggles. If vapor exposure causes eye discomfort, use a full-face respirator.

SKIN PROTECTION:

Use protective clothing impervious to this material.

RESPIRATORY PROTECTION:

Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required, use an approved air-purifying or positive pressure supplied-air respirator depending in the potential airborne concentration.

EXPOSURE GUIDELINES:

METHYLCYCLOPENTADIENYL-MANGANESE TRICARBONYL

ACGIH TWA: 0.2 mg/m³

1,2,4-TRIMETHYLBENZENE

ACGIH TWA: 25 ppm

NAPHTHALENE

OSHA PEL: 10 ppm, 50 mg/m³

OSHA TWA: 10 ppm, 50 mg/m³

ACGIH TWA: 10 ppm, 52 mg/m³

OSHA STEL: 15 ppm, 75 mg/m³

ACGIH STEL: 15 ppm, 79 mg/m³

1,3,5-TRIMETHYLBENZENE

ACGIH TWA: 25 ppm

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

FORM: **Liquid**
COLOR: **Orange**
ODOR: **Aromatic hydrocarbon**
VAPOR PRESSURE: **0.19 mm Hg @ 20 C**
SOLUBILITY IN WATER ...: **Insoluble in cold water**
SPECIFIC GRAVITY: **1.15 g/cm³ at 20 Deg C (Water = 1)**
PH: **Not applicable**
VISCOSITY: **1.44 cP at 25 Deg C**

SECTION 10: STABILITY AND REACTIVITY

STABILITY:

MMT is extremely photosensitive and decomposes rapidly when exposed to light. Photolytic action converts the organic compound to a mixture of non-hazardous manganese oxides, carbonates, and organics derived from methylcyclopentadiene. These decomposition products are less toxic than the neat MMT. MMT photolyses rapidly in water.

INCOMPATIBILITY WITH OTHER MATERIALS:

Avoid contact with strong oxidizing and reducing agents.

CONDITIONS TO AVOID:

Avoid exposure to light, high temperatures, sparks, and open flames.

SECTION 11: TOXICOLOGICAL INFORMATION

ECOTOXISITY

N/A

SECTION 12: ECOLOGICAL INFORMATION

MISCELLANEOUS:

Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment, based on calculation.

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SECTION 13: DISPOSAL CONSIDERATION

WASTE DISPOSAL:

Do not dispose of into waste water treatment facilities. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.

SECTION 14: TRANSPORT REGULATION

D.O.T. SHIPPING NAME: Metal Carbonyls, Liquid, n.o.s (contains methyl-

TECHNICAL SHIPPING NAME: cyclopentadienyl manganese tricarbonyl)

D.O.T. HAZARD CLASS: 6.1

UN NUMBER: UN3281

D.O.T. LABEL: Poison, Marine Pollutant

D.O.T. PLACARD: Flammable Liquid, Toxic

BULK CLASS: 6.1

PACKAGE CLASS: Packing Group III

MISCELLANEOUS:

This material is a marine pollutant when shipped in quantities greater than 119 gallons.

If shipping overseas, or via air, the proper shipping name is: Flammable Liquid, Toxic, n.o.s., (Contains Petroleum Distillates, methylcyclopentadienylmanganesetricarbonyl), 3, UN1992, PGIII.

SECTION 15: REGULATORY INFORMATION

Reportable Quantity: N/A

NFPA RATING:	HEALTH	2
	FLAMMABILITY	2
	REACTIVITY	0

TOXIC SUBSTANCE CONTROL ACT (TSCA):

SECTION 16: OTHER INFORMATION

ENVIRONMENTAL FATE:

SARA HAZARDOUS CATEGORY:

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Section 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definition to meet the following categories:

An immediate health hazard

A delayed health hazard

A fire hazard

OSHA HAZARD COMMUNICATION STANDARD:

**This product is a Hazardous Chemical" as defined by the OSHA Hazard
Communication Standard, 29 CFR 1910.1200.**

All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory. NOTICE: The information presented in good faith and believed to be accurate as of the effective date shown above. However no warranty express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that their activities comply with federal, state or provincial, and local laws.