



Material Safety Data Sheet

(Methylcyclopentadienyl)manganese tricarbonyl

MSDS# 98820

Section 1 - Chemical Product and Company Identification

MSDS Name: (Methylcyclopentadienyl)manganese tricarbonyl

Catalog Numbers: AC315590000, AC315590010

Synonyms: MMT; 2-Methylcyclopentadienyl manganese tricarbonyl.

Company Identification: Acros Organics BVBA
Janssen Pharmaceuticaaan 3a
2440 Geel, Belgium

Company Identification: (USA) Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01

For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99

Emergency Number US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300

CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#: 12108-13-3
Chemical Name: (Methylcyclopentadienyl)manganese tricarbonyl
%: 97
EINECS#: 235-166-5

Hazard Symbols: T+



Risk Phrases: 24 26/28

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Danger! Toxic if absorbed through the skin. May cause eye, skin, and respiratory tract irritation. May be harmful or fatal if inhaled or swallowed. Target Organs: Kidneys, liver, lungs.

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation. Toxic in contact with skin.

Ingestion: May be fatal if swallowed. May cause irritation of the digestive tract.

Inhalation: May be fatal if inhaled. May cause respiratory tract irritation.

Chronic: Chronic exposure may lead to liver and lung damage.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: POISON material. If swallowed, get medical aid immediately. Only induce vomiting if directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Will burn if involved in a fire.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Autoignition Temperature: Not available.

Flash Point: 96 deg C (204.80 deg F)

Explosion Limits: Not available
Lower:

Explosion Limits: Not available
Upper:

NFPA Rating: health: 4; flammability: 1; instability: 0;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Provide ventilation. Evacuate unnecessary personnel. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use only in a chemical fume hood.

Storage: Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
(Methylcyclopentadienyl)manganese tricarbonyl	0.2 mg/m3 (as Mn); Skin - potential significant contribution to overall exposure by the cutaneous route	0.2 mg/m3 TWA (as Mn) 500 mg/m3 IDLH (as Mn) (listed under Manganese compounds, n.o.s.).	5 mg/m3 Ceiling (as Mn) (listed under Manganese compounds, n.o.s.).

OSHA Vacated PELs: (Methylcyclopentadienyl)manganese tricarbonyl: 0.2 mg/m3 TWA (as Mn)

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Color: clear slight yellow
Odor: Not available
pH: Not available
Vapor Pressure: 0.05 mm Hg @ 20 deg C
Vapor Density: >1.0
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: 232 - 233 deg C @ 760 mmHg
Freezing/Melting Point: -1 deg C (30.20°F)
Decomposition Temperature: Not available
Solubility in water: 70 ppm (25°C)
Specific Gravity/Density: 1.380
Molecular Formula: C9H7MnO3
Molecular Weight: 218.10

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials, ignition sources, excess heat.
Incompatibilities with Other Materials: Strong oxidizing agents, halogens.
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, oxides of manganese.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 12108-13-3: OP1450000
RTECS:
CAS# 12108-13-3: Draize test, rabbit, skin: 100 mg/24H Mild;
Inhalation, mouse: LC50 = 58600 ug/m3/4H;
Inhalation, rat: LC50 = 76 mg/m3/4H;
Oral, mouse: LD50 = 34 mg/kg;
LD50/LC50: Oral, rabbit: LD50 = 95 mg/kg;
Oral, rat: LD50 = 8 mg/kg;
Skin, rabbit: LD50 = 140 mg/kg;
Skin, rat: LD50 = 665 mg/kg;
Other: LD50(Oral, rat)= 8
Carcinogenicity: (Methylcyclopentadienyl)manganese tricarbonyl - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other: Do not empty into drains.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Please contact Fisher Scientific for shipping information

Hazard Class:

UN Number:
Packing Group:
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T+

Risk Phrases:

R 24 Toxic in contact with skin.

R 26/28 Very toxic by inhalation and if swallowed.

Safety Phrases:

S 28A After contact with skin, wash immediately with plenty of water.

S 36/37 Wear suitable protective clothing and gloves.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 12108-13-3: Not available

Canada

CAS# 12108-13-3 is listed on Canada's DSL List

Canadian WHMIS Classifications: D1A

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

CAS# 12108-13-3 is listed on Canada's Ingredient Disclosure List

US Federal

TSCA

CAS# 12108-13-3 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 3/15/1999

Revision #5 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.
