

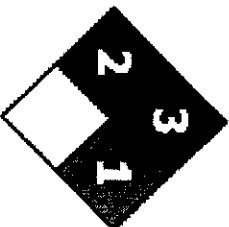
multi-chem®

INDUSTRY PROVEN...
VALUES DRIVEN™

Material Safety Data Sheet

NFPA

HMS



Issuing Date 05-Nov-2009 Revision Date 26-Nov-2012 Revision Number 4

Product Name MC MX 5-1625

Product Code MC MX 5-1625

UN-No 1993

Recommended Use Paraffin/Asphaltene Solvent.

Manufactured by:
Multi-Chem Group LLC
2905 Southwest Blvd
San Angelo, TX 76904
Phone: 1 325 223 6200

Emergency Telephone Number 1 800 535 5053
+1 352 323 3500 (Outside United States)
613 996 6666 or *666 on a cell phone (Inside Canada Only)

Emergency Overview

Flammable Liquid

Irritating to eyes, respiratory system and skin
May cause burns of eyes, skin and mucous membranes
Contains a known or suspected reproductive toxin
Harmful by inhalation, in contact with skin and if swallowed

Appearance	Clear to Slightly Hazy, Light Amber to Dark Amber	Physical State	Liquid	Odor	Organic
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Potential Health Effects Principle Routes of Exposure Acute Toxicity Eye contact, Skin contact, Inhalation, Ingestion.

Eyes

Irritating to eyes. Risk of serious damage to eyes.

Skin

Irritating to skin. May cause burns. Prolonged skin contact may defat the skin and produce dermatitis.

Inhalation

Inhalation of vapors in high concentration may cause irritation of respiratory system. Exposure to mists may cause severe irritation or burns to the upper respiratory tract. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination.

Ingestion

Harmful if swallowed. Potential for aspiration if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause additional affects as listed under "Inhalation".

Chronic Effects

Prolonged exposure may cause chronic effects. Contains a known or suspected reproductive hazard.

Aggravated Medical Conditions

Skin disorders. Preexisting eye disorders. Neurological disorders. Respiratory disorders. Liver disorders. Kidney disorders. Blood disorders.

Environmental Hazard

See Section 12 for additional Ecological Information.

Formula

Mixture

Chemical Name	CAS-No	Weight %
Toluene	108-88-3	30-60
Hexanes	110-54-3	30-60
Methylcyclopentane	96-37-7	5-10
Benzenesulfonic acid, C10-16-alkyl derivatives	68584-22-5	1-5
Cyclopentane	287-92-3	1-5

General Advice

Get medical attention immediately if symptoms occur.

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek immediate medical attention/advice.

Skin Contact

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Seek immediate medical attention/advice.

Inhalation

Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Seek immediate medical attention/advice.

Ingestion

Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Rinse mouth. Get medical attention.

Notes to Physician

If ingested, material may be aspirated into the lungs and cause chemical pneumonitis.

Flammable Properties

Flammable liquid.

Flash Point

15 °C / 59 °F

Suitable Extinguishing Media

Water spray. Foam. Dry powder. Carbon dioxide (CO₂). Liquid may float on top of water and re-ignite.

Unsuitable Extinguishing Media

Do not use a solid water stream as it may scatter and spread fire.

Hazardous Combustion Products

Carbon oxides, Sulfur oxides, Sulfuric acid.

Explosion Data

Sensitivity to Mechanical Impact
Sensitivity to Static Discharge

Not sensitive.
 May be ignited by heat, sparks or flames.

Specific Hazards Arising from the Chemical

Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapors may travel to source of ignition and flash back.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA	Health Hazard	2	Flammability	3	Stability	1	Physical and Chemical Hazards

Personal Precautions

Only trained and properly protected personnel must be involved in clean-up operations. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.

Methods for Containment

Dike far ahead of liquid spill for later disposal.

Methods for Cleaning Up

Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Ground and bond containers when transferring material. Use clean non-sparking tools to collect absorbed material.

Handling

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Take precautionary measures against static discharges. Remove all sources of ignition.

Storage

Keep containers tightly closed in a cool, well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition.

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Toluene 108-89-3	TWA: 20 ppm	TWA: 200 ppm	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m ³ STEL: 150 ppm
Hexanes 110-54-3	TWA: 50 ppm	TWA: 1800 mg/m ³ TWA: 500 ppm (vacated) TWA: 180 mg/m ³ (vacated) TWA: 50 ppm	IDLH: 1100 ppm TWA: 180 mg/m ³ TWA: 50 ppm
Cyclopentane 287-92-3	TWA: 600 ppm	(vacated) TWA: 1720 mg/m ³ (vacated) TWA: 600 ppm	TWA: 1720 mg/m ³ TWA: 600 ppm
Chemical Name	Alberta	British Columbia	Saskatchewan

Toluene 108-98-3	TWA: 50 ppm TWA: 188 mg/m ³	TWA: 20 ppm	TWA: 50 ppm STEL: 60 ppm
Hexanes 110-54-3	TWA: 50 ppm TWA: 178 mg/m ³	TWA: 20 ppm	TWA: 178 mg/m ³ TWA: 50 ppm STEL: 220 mg/m ³ STEL: 62.5 ppm
Cyclopentane 287-92-3	TWA: 1720 mg/m ³ TWA: 600 ppm	TWA: 600 ppm	TWA: 600 ppm TWA: 1720 mg/m ³ STEL: 900 ppm STEL: 2560 mg/m ³

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/Face Protection

Safety glasses with side-shields. If splashes are likely to occur, wear: Goggles. Face-shield.

Skin and Body Protection

Wear protective gloves/clothing.

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures

Remove and wash contaminated clothing before re-use. Wash hands before breaks and immediately after handling the product.

Appearance	Clear to Slightly Hazy Light Amber to Dark Amber	Odor	Organic
Physical State	Liquid	pH	No data available
Flash Point	15 °C / 59 °F	Autoignition Temperature	No data available
Boiling Point/Range	No data available	Pour Point	-40 °C / -40 °F
Explosion Limits	No data available	Flammability Limits in Air	No data available
Specific Gravity	0.7465-0.7715	Solubility	Oil soluble
Evaporation Rate	No data available	Vapor Pressure	No data available
Vapor Density	No data available	Density	6.22-6.43 lbs/gal

Stability

Stable under recommended storage conditions.

Incompatible Products

Strong oxidizing agents. Strong bases.

Conditions to Avoid

Heat, flames and sparks.

Hazardous Decomposition Products Carbon oxides. Sulfur oxides. Sulfuric acid.

Hazardous Polymerization

None under normal processing.



Acute Toxicity

Product Information

The product itself has not been tested.

Irritation

Irritating to eyes, respiratory system and skin. May cause burns.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Toluene	636 mg/kg (Rat)	12124 mg/kg (Rat)	12.5 mg/L (Rat) 4 h
Hexanes	28710 mg/kg (Rat)	8390 mg/kg (Rabbit)	26700 ppm (Rat) 1 h
Benzenesulfonic acid, C10-16-alkyl derivatives	530 mg/kg (Rat)	3000 mg/kg (Rabbit)	48000 ppm (Rat) 4 h

Chronic Toxicity

Chronic Toxicity Prolonged exposure may cause chronic effects. Contains a known or suspected reproductive hazard.

Reproductive Toxicity

Reproductive Toxicity Contains a known or suspected reproductive toxin.

Teratogenic Effects

Teratogenic Effects Possible risk of harm to the unborn child

Target Organ Effects

Target Organ Effects Eyes, Skin, Respiratory system, Central nervous system (CNS), Liver, Kidney, Blood.

Ecotoxicity

Ecotoxicity The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Toluene	EC50 = 12.5 mg/L 72 h EC50 > 433 mg/L 96 h	LC50 11.0-15.0 mg/L Lepomis macrochirus 96 h LC50 14.1-17.16 mg/L Oncorhynchus mykiss 96 h LC50 15.22-19.05 mg/L Pimephales promelas 96 h LC50 5.89-7.81 mg/L Oncorhynchus mykiss 96 h LC50 50.87-70.34 mg/L Poecilia reticulata 96 h LC50= 12.6 mg/L Pimephales promelas 96 h LC50= 28.2 mg/L Poecilia reticulata 96 h LC50= 5.8 mg/L Oncorhynchus mykiss 96 h LC50= 54 mg/L Oryzias latipes 96 h	EC50 = 19.7 mg/L 30 min	EC50 = 11.3 mg/L 48 h EC50 = 310 mg/L 48 h
Hexanes		LC50= 2.5 mg/L Pimephales promelas 96 h LC50= 4.12 mg/L Lepomis macrochirus 96 h LC50= 4.14 mg/L Oncorhynchus mykiss 96 h LC50= 3 mg/L Oncorhynchus mykiss 96 h	EC50 = 5 mg/L 6 h	EC50 = 3.87 mg/L 48 h
Benzenesulfonic acid, C10-16-alkyl derivatives				EC50 = 2.9 mg/L 48 h
Cyclopentane				EC50 = 10.5 mg/L 48 h
Chemical Name		Log Pow		
Toluene		= 2.65		
Benzenesulfonic acid, C10-16-alkyl derivatives		= 2.23 °C		
Cyclopentane		= 2.05		

Waste Disposal Method

Waste Disposal Method Dispose of in accordance with local regulations.

Contaminated Packaging

Dispose of in accordance with local regulations.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Toluene - 106-88-3			Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Toluene	Toxic; Ignitable
Hexanes	Toxic; Ignitable
Cyclopentane	Toxic; Ignitable

DOT

Proper Shipping Name Flammable Liquid N.O.S. (Contains Toluene and Hexanes)
Hazard Class 3
UN-No 1993
Packing Group II
ERG Code 128

IATA

UN-No 1993
Proper Shipping Name Flammable Liquid N.O.S. (Contains Toluene and Hexanes)
Hazard Class 3
Packing Group II

IMDG/IMO

Proper Shipping Name Flammable Liquid N.O.S. (Contains Toluene and Hexanes)
Hazard Class 3
UN-No 1993
Packing Group II

TDG

Proper Shipping Name Flammable Liquid N.O.S. (Contains Toluene)
Hazard Class 3
UN-No 1993
Packing Group II

International Inventories

Component	TSCA	DSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS

Toluene 108-88-3 (30-60)	Present	X	X	3-2	X	KE-33936	X	X
Hexanes 110-54-3 (30-60)	Present	X	X	2-6	X	KE-18626	X	X
Methylcyclopentane 96-37-7 (5-10)	Present	X	X	-	X	KE-23724	X	X
Benzenesulfonic acid, C10-16-alkyl derivatives 68584-22-5 (1-5)	Present	X	X	-	X	KE-02595	X	X
Cyclopentane 287-92-3 (1-5)	Present	X	X	3-4166	X	KE-09297	X	X

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Toluene	108-88-3	30-60	1.0
Hexanes	110-54-3	30-60	1.0

SARA 311/312 Hazard Categories

- Acute Health Hazard Yes
- Chronic Health Hazard Yes
- Fire Hazard Yes
- Sudden Release of Pressure Hazard No
- Reactive Hazard No
- Clean Water Act No

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Toluene 108-88-3 (30-60)	1000 lb	X	X	X

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following substances which are listed hazardous air pollutants (HAPs) under Section 112 of the Clean Air Act:

Chemical Name	CAS-No	Weight %	HAPs data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Toluene	108-88-3	30-60	Present	Group I		
Hexanes	110-54-3	30-60	Present	Group V		

CERCLA

Chemical Name	Hazardous Substances RQS	Extremely Hazardous Substances RQS
Toluene	1000 lb	
Hexanes	5000 lb	

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	California Prop. 65			
Toluene	108-88-3	Developmental Female Reproductive			
Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Toluene	X	X	X	X	X
Hexanes	X	X	X	X	X
Methylcyclopentane	X	X	X	X	X
Cyclopentane	X	X	X	X	X

International Regulations

Mexico - Grade

No information available

Chemical Name	Carcinogen Status	Exposure Limits
Toluene		Mexico: TWA 50 ppm Mexico: TWA 188 mg/m ³
Hexanes		Mexico: TWA= 176 mg/m ³ Mexico: TWA= 1760 mg/m ³

Canada

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

WHMIS Hazard Class

- B2 Flammable liquid
- D2A Very toxic materials
- D2B Toxic materials



Chemical Name	NPRI
Toluene	X
Hexanes	X



Prepared By Amanda Burwell

Issuing Date 11/5/2009

Revision Date 26-Nov-2012

Reason for Revision (M)SDS sections updated. 1. 2. 3. 5. 9. 11. 14. 15. 16.

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS