

# Safety Data Sheet

MT-704 DIFFUSION PUMP FLUID



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## Section 1. Identification

Product Name MT-704 Diffusion Pump Fluid

Physical State Colorless to straw colored liquid

Chemical Family Organosiloxane

Recommended use Working fluid for gas capture vacuum pump

Supplier information Midwest Tungsten Service, Inc.  
540 Executive Drive  
Willowbrook, IL 60527  
630-325-1001

Emergency contact call 911 or Poison Control Center at 800-222-1222

## Section 2. Hazards Identification

GHS Classification Not a hazardous substance or mixture

GHS Label Element Not a hazardous substance or mixture

Other Hazards None known

## Section 3. Composition and Information on Ingredients

Chemical Name	Synonym	CAS#	Conc.
Tetramethyl tetraphenyl trisiloxane		3982-82-9	>65%
Dimethyl tetraphenyl disiloxane		807-28-3	<20%
Hexamethyl tetraphenyl tetrasiloxane	Alkyl phenyl siloxane	6904-66-1	<15%

Hazardous Ingredients No hazardous ingredients

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## Section 4. First Aid Measures

If Inhaled	Remove to fresh air. Get medical attention if symptoms occur.
In case of skin contact	Wash with water and soap as a precaution. Get medical attention if symptoms occur.
In case of eye contact	Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.
If swallowed	If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.
Most important symptoms and effects, both acute and delayed	None known
Protection of first-aiders	No special precautions are necessary for first aid responders
Notes to physician	Treat symptomatically and supportively

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## Section 5. Fire Fighting Measures

Suitable extinguishing media	Water spray Alcohol-resistant foam Carbon dioxide (CO <sub>2</sub> ) Dry Chemical
Unsuitable extinguishing media	None known
Specific hazards during fire fighting	Exposure to combustion products may be a hazard to health.
Hazardous combustion products	Carbon oxides Silicon oxides Formaldehyde
Specific extinguishing methods	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so.
Special protective equipment for fire-fighters	Wear self-contained breathing apparatus for firefighting, if necessary. Use personal protective equipment.

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## Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Follow safe handling advice and personal protective equipment recommendations
Environmental precautions	Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and clean-up	<p>Soak up with inert absorbent material. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining material with suitable absorbent.</p> <p>Local or national regulations may apply to releases and disposal of this material, as well as the materials employed in the clean-up process. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.</p>

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## Section 7. Handling and Storage

Technical measures	See Engineering Measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
Local/Total ventilation	Use only with adequate ventilation.
Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice.
Conditions for safe storage	Keep in properly labelled containers. Store in accordance with national/local regulations.
Materials to avoid	Do not store/mix with strong oxidizing agents.

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## Section 8. Exposure Controls/Personal Protection

Ingredients with workplace control parameters	Contains no substances with occupational exposure limit values.
Engineering measures	Processing may form hazardous compounds (see Section 10). Ensure adequate ventilation, especially in confined areas. Minimize workplace exposure concentrations.

### Personal Protective Equipment

Respiratory protection	No personal respiratory protective equipment normally required
Hand protection	Wash hands before breaks and at end of workday.
Eye protection	Wear safety glasses.
Skin and body protection	Skin should be washed with soap and water after contact
Hygiene measures	- Eye wash and safety shower stations should be located close to work area.  - When using, do not eat, drink, or smoke.  -Wash contaminated clothing before reuse.

These precautions are for room temperature handling. Use at elevated temperatures or aerosol/spray applications may require further added precautions.

For information regarding the use of silicones/organic oils in consumer aerosol applications, please refer to the guidance document regarding the use of these types of materials that has been developed by the silicone industry ( [www.SEHSC](http://www.SEHSC) ) or contact the Midwest Tungsten customer service group.

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## Section 9. Physical and Chemical Properties

Appearance	Liquid
Color	Clear white to yellow
Odor	None
Odor Threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	215°C
Flash point	221°C
Evaporation rate	No data available
Flammability (solid, gas)	Not applicable
Upper explosion limit	No data available
Lower explosion limit	No data available
Relative vapor density	No data available
Water solubility	Insoluble
Partition coefficient: n-octanol/water	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	39 mm <sup>2</sup> /s
Explosive properties	Not explosive
Oxidizing properties	Not classified as oxidizing
Molecular weight	484

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## Section 10. Stability and Reactivity

Reactivity	Not classified as a reactivity hazard.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Use at elevated temperatures may form hazardous compounds. Can react with strong oxidizing agents. Hazardous decomposition products formed at elevated temperatures.
Conditions to avoid	None known.
Incompatible materials	Oxidizing agents
Hazardous decomposition products – thermal decomposition	Formaldehyde

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## Section 11. Toxicological Information

### Information on likely routes of exposure

Inhalation  
Skin contact  
Ingestion  
Eye contact

### Acute toxicity

Not classified based on available information

### Skin corrosion/irritation

No harm or irritation under normal condition. Prolonged or repeated contact may cause irritation.

### Serious eye damage/eye irritation

May cause eye irritation.

### Respiratory or skin sensitization

Not classified based on available information

### Ingestion

May be harmful if ingested

### Germ cell mutagenicity

Not classified based on available information

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## Section 11. Toxicological Information – continued

### Carcinogenicity

Not classified based on available information

IARC	No ingredient of this product present at levels greater than 0.1% is identified a probable, possible, or confirmed human carcinogen by IARC
OSHA	No ingredient of this product present at levels greater than 0.1% is identified a probable, possible, or confirmed human carcinogen by OSHA
NTP	No ingredient of this product present at levels greater than 0.1% is identified a probable, possible, or confirmed human carcinogen by NTP

### Reproductive toxicity

Not classified based on available information

### STOT-single exposure

Not classified based on available information

### STOT-repeated exposure

Not classified based on available information

### Aspiration toxicity

Not classified based on available information

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## Section 12. Ecological Information

Ecotoxicity	No data available
Persistence and degradability	No data available
Bio-accumulative potential	No data available
Mobility in soil	No data available
Other adverse effects	No data available

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## Section 13. Disposal Considerations

### Disposal Methods

Resource Conservation and Recovery Act	When a decision is made to discard this material as supplied, it is classified as RCRA hazardous waste.
Waste Code	D018
Waste from residues	Dispose of in accordance with local regulations.
Contaminated packaging	Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal.

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## Section 14. Transport Information

### International Regulation

#### UNRTDG

Not regulated as a dangerous good

#### IATA-DGR

Not regulated as a dangerous good

#### IMDG-Code

Not regulated as a dangerous good

#### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied

### Domestic Regulation

#### 49 CFR

Not regulated as a dangerous good



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## Section 15. Regulatory Information

TSCA	All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.
SARA Section 302 Extremely Hazardous Substances	None
SARA Section 304 CERCLA Hazardous substances	None
SARA 311 and SARA 312	No Hazards
SARA 313 Toxic Chemicals	None present
REACH	All ingredients registered or exempt
California Prop 65	Contains no chemicals known to the State of California to cause cancer, birth or reproductive defects
Massachusetts	Contains no ingredients regulated by MA Right-to-Know Law
New Jersey	Contains no ingredients regulated by NJ Right-to-Know Law
Pennsylvania	Contains no ingredients regulated by PA Right-to-Know Law

## Section 16. Other Information

### HMIS III

Health	1
Flammability	1
Reactivity/Physical Hazard	0
Personal Protection	Safety Glasses, Gloves

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.