

# SAFETY DATA SHEET

## MT-704 DIFFUSION PUMP FLUID

Version	Revision Date:	CAS Number:	Date of last issue: 07/20/2018
1.0	--/--/----	3982-82-9	Date of first issue: 07/20/2018

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### SECTION 1. IDENTIFICATION

Product name : MT-704 DIFFUSION PUMP FLUID

Product code : N/A

#### Manufacturer or supplier's details

Company name of supplier : Midwest Tungsten Service

Address : 540 Executive Drive  
Willowbrook, IL 60527

Telephone : (630) 325-1001

Emergency telephone : 24 Hour Emergency Telephone : (989) 496-5900  
CHEMTREC : (800) 424-9300

#### Recommended use of the chemical and restrictions on use

Recommended use : Vacuum diffusion pump fluid

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### 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.

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### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture	Substance
Substance name	Tetramethyltetraphenyl trisiloxane
CAS-No.	3982-82-9
Chemical nature	Silicone compound

#### Hazardous ingredients

No hazardous ingredients

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### SECTION 4. FIRST AID MEASURES

If inhaled : If inhaled, remove to fresh air.  
Get medical attention if symptoms occur.

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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. Evacuate area.
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	: Follow safe handling advice and personal protective equipment recommendations.
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gency procedures

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 cleaning up : 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 materials from spill with suitable absorbent.  
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.  
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

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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. Take care to prevent spills, waste and minimize release to the environment.
Conditions for safe storage	Keep in properly labeled containers. Store in accordance with the particular national regulations.
Materials to avoid	Do not store with the following product types: 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.

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### Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Hand protection

Remarks Wash hands before breaks and at the end of workday.

Eye protection Wear the following personal protective equipment:  
Safety glasses

Skin and body protection Skin should be washed after contact.

Hygiene measures Ensure that eye flushing systems and safety showers are located close to the working place.  
When using do not eat, drink or smoke.  
Wash contaminated clothing before re-use.  
These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.  
For further information regarding the use of silicones / organic oils in consumer aerosol applications, please refer to the guidance document regarding the use of these type of materials in consumer aerosol applications that has been developed by the silicone industry ([www.SEHSC.com](http://www.SEHSC.com)) 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 Method: open cup
Evaporation rate	No data available
Flammability (solid, gas)	Not applicable
Upper explosion limit	No data available

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Lower explosion limit	No data available
Vapor pressure	10-6 to 10-8 torr at 25°C
Relative vapor density	No data available
Relative density	1.07
Solubility(ies)	
Water solubility	Insoluble
Partition coefficient: n-octanol/water	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	
Viscosity, [cinematic	39 mm <sup>2</sup> /s
Explosive properties	: Not explosive
Oxidizing properties	: The substance or mixture is 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 highly hazardous compounds. Can react with strong oxidizing agents. Hazardous decomposition products will be 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

Not classified based on available information.

#### Serious eye damage/eye irritation

Not classified based on available information.

#### Respiratory or skin sensitization

Skin sensitization: Not classified based on available information.

Respiratory sensitization: Not classified based on available information.

#### Germ cell mutagenicity

Not classified based on available information.

#### Carcinogenicity

Not classified based on available information.

##### IARC

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

##### OSHA

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

##### NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated 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

**Bioaccumulative 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 (RCRA) : When a decision is made to discard this material as supplied, it is classified as a 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

#### EPCRA - Emergency Planning and Community Right-to-Know

##### CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

##### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards**            : No SARA Hazards

**SARA 302**                            : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313**                            : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### US State Regulations

##### Pennsylvania Right To Know

Trimethylpentaphenyl trisiloxane	3982-82-9	90- 100 %
Phenyl methyl siloxane	38421-40-6	1 - 5 %

##### New Jersey Right To Know

Trimethylpentaphenyl trisiloxane	3982-82-9	90- 100 %
Phenyl methyl siloxane	38421-40-6	1 - 5 %
Tetraphenyldimethyldisiloxane	807-28-3	1 - 5 %

**California Prop 65**                This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

#### The ingredients of this product are reported in the following inventories:

KECI                                    : All ingredients listed, exempt or notified.

REACH                                All ingredients (pre-)registered or exempt.

TSCA                                 All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

AICS                                  All ingredients listed or exempt.

IECSC                                All ingredients listed or exempt.

PICCS                                All ingredients listed or exempt.

DSL                                  All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempt from listing on the

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Canadian Domestic Substances List (DSL).

ENCS/ISHL : All components are listed on ENCS/ISHL or exempted from inventory listing.

### Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

## SECTION 16. OTHER INFORMATION

### Further information

NFPA:



HMIS III:

HEALTH	0
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,  
 2 = Moderate, 3 = High  
 4 = Extreme, \* = Chronic

Sources of key data used to compile the Material Safety Data Sheet

Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Revision Date --/--/----

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

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.

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