
SECTION 1: IDENTIFICATION

Product name Midwest Tungsten Service 704 Diffusion Pump Fluid

C.A.S. Number 3982-82-9

Company name of supplier Midwest Tungsten Service

Telephone (630) 325-1001

Recommended Use Hydraulic fluids and additives

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/INFORMATION ON INGREDIENTS

Substance / Mixture	Substance
Chemical nature	Tetramethyltetraphenyl trisiloxane
CAS-No.	3982-82-9
Chemical nature	Silicone Compound
Hazardous ingredients	No hazardous ingredients

SECTION 4: FIRST AID MEASURES

If Inhaled: 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.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water spray
Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical

Unsuitable extinguishing media: None known.

Specific hazards during fire fighting: Fire burns more vigorously than would be expected. 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.

Protective equipment for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition.
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 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.

SECTION 7: HANDLING & 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.

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 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 reuse.
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).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: liquid

Color: Colorless to pale 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
Lower explosion limit	No data available
Vapor pressure	No data available
Relative vapor density	No data available
Relative density	1.065
Solubility(ies)	
Water solubility	No data available
Partition coefficient noctanol/water	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	
Viscosity, kinematic	38.0 cSt

Explosive properties

Not explosive

Oxidizing properties

The substance or mixture is not classified as oxidizing.

Molecular weight

No data available

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

SECTION 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

- Inhalation
- Skin contact
- Ingestion
- Eye contact

Acute toxicity - Data

Not classified based on available information.

Product:

Acute oral toxicity

LD50 > 2,000 mg/kg

Assessment. The substance or mixture has no acute oral toxicity
Remarks. Based on test data

Acute dermal toxicity

LD50 > 2,000 mg/kg

Assessment. The substance or mixture has no acute dermal
toxicity
Remarks. Based on test data

Skin corrosion/irritation

Not classified based on available information.

Product:

Result No skin irritation

Remarks Based on test data

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Result No eye irritation

Remarks Based on test data

Respiratory or skin sensitization

Skin sensitization. Not classified based on available information. Respiratory sensitization Not classified based on available information.

Product:

Assessment Does not cause skin sensitization.

Test Type Maximization Test (GPMT)

Remarks Based on test data

Germ cell mutagenicity

Not classified based on available information.

Product:

Genotoxicity in vitro

Test Type. Bacterial reverse mutation assay (AMES)
Result. Negative Remarks. Based on test data

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.

Product:

Routes of exposure Ingestion

Assessment. No significant health effects observed in animals at concentrations of 100 mg/kg bw or less.

Repeated dose toxicity

Product:

Application Route Ingestion

Remarks Based on test data

Aspiration toxicity

Not classified based on available information.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish

LC50 (Cyprinus carpio (Carp)) > 1,000 mg/l
Exposure time 96 h

LC50 (Salmo gairdneri) > 1,000 mg/l
Exposure time 96 h

Persistence and degradability
No data available

Bioaccumulative potential
No data available

Mobility in soil
No data available

Other adverse effects
No data available

SECTION 13: DISPOSAL CONSIDERATION

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.

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

49 CFR

Not regulated as a dangerous good

SECTION 15: REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

Ingredients	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Benzene	71-43-2	10	*

* Calculated RQ exceeds reasonably attainable upper limit.

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

Tetramethyltetraphenyl trisiloxane 3982-82-9 90 - 100 %

Phone: 1-800-626-0226 :: 630-325-1001

www.tungsten.com

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Willowbrook, IL 60527
mts@tungsten.com

New Jersey Right To Know

Tetramethyltetraphenyl trisiloxane 3982-82-9 90 - 100 %

Tetraphenyldimethyldisiloxane 807-28-3 1 - 5 %

California Prop 65

WARNING! This product contains a chemical known in the State of California to cause cancer.

Benzene 71-43-2

WARNING This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

Benzene 71-43-2

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

NZIoC All ingredients listed or exempt.

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.

PICCS All ingredients listed or exempt.

KECI All ingredients listed, exempt or notified.

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

IECSC All ingredients listed or exempt.

AICS 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 Canadian Domestic Substances List (DSL).

TCSI All ingredients listed or exempt.

Inventories

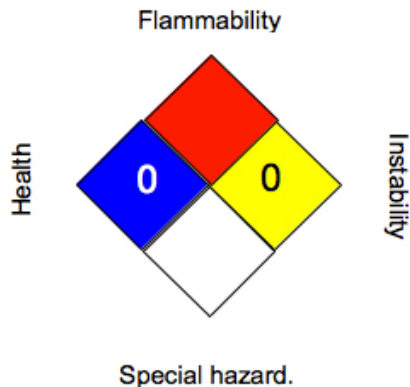
AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

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/](http://echa.europa.eu/)

Revision Date

01/04/2016

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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