SAFETY DATA SHEET

Issue Date 01-31-2018 **Revision Date** 01-31-2018 **Version** 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name: MOC SYNTHETIC DCT FLUID

Other means of identification

Common Name: 0426
UN/ID No Not regulated
Synonyms None
Product Categories Lubricant, Automotive

Recommended use of the chemical and restrictions on use

Sale and Use Restrictions Not applicable
Recommended Use Restricted to professional users.
Uses advised against Consumer use

Details of the supplier of the safety data sheet

Supplier Address
MOC PRODUCTS CO., INC.
12306 Montague Street
Pacoima, CA 91331

Emergency telephone number

Company Phone Number MOC PRODUCTS CO., INC. (818) 794-3500
Emergency Telephone CHEMTREC 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin sensitization	Category 1
Aspiration toxicity	Category 1

Label elements

Emergency Overview

Danger

Hazard statements
Harmful in contact with skin
Harmful if inhaled
May cause an allergic skin reaction
May be fatal if swallowed and enters airways

Appearance Oil **Physical state** Liquid **Odor** Bland

Precautionary Statements - Prevention
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response
Specific measures (see prevention statements and warnings on this label)
Specific treatment (see response statements below and Section 4 of the Safety Data Sheet)

IF ON SKIN: Wash with plenty of soap and water
Call a POISON CONTROL CENTER or doctor/physician if you feel unwell
Wash contaminated clothing before reuse
If skin irritation or rash occurs: Get medical advice/attention
IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CONTROL CENTER or doctor/physician if you feel unwell
IF SWALLOWED: Immediately call a POISON CONTROL CENTER or doctor/physician
Do not induce vomiting

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Other information
• May be harmful if swallowed
93.77 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight %	Trade Secret
Polyalphaolefins	MIXTURE	55-90	*
Mineral Oil	MIXTURE	8-15	*
Substituted thiadiazole	CONFIDENTIAL	0.27-1.4	*
Heterocyclic Ether	CONFIDENTIAL	0.27-1.4	*
Fatty acid amide	CONFIDENTIAL	0.27-1.4	*
Alkaryl amine	CONFIDENTIAL	0.27-1.4	*
Borate Ester	UNKNOWN	0.14-0.3	*
Ethoxylated amine	CONFIDENTIAL	0-0.14	*
Diphenylamine	122-39-4	0.1-0.14	*
2-Ethylhexyl methacrylate	688-84-6	0.1-0.14	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

The mineral oil contained in this material may be described by one or more of the following CAS Nos. : CAS# 72623-87-1, CAS#64742-54-7, CAS#64742-65-0, CAS# 64742-55-8, CAS#64742-56-9
Polyalphaolefins contained in this material may be described by one or more of the following CAS Nos. : CAS# 151006-58-5, CAS#68649-11-6, and CAS#68037-01-4

4. FIRST AID MEASURES

First aid measures

Skin contact Wash off immediately with soap and plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.

Inhalation IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CONTROL CENTER or doctor/physician if you feel unwell.

Eye contact Flush eye(s) immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation occurs.

Ingestion Do not induce vomiting. Call a physician or Poison Control Center immediately. Aspiration may cause pulmonary oedema and pneumonitis.

Notes to Physician Aspiration hazard if swallowed - can enter lungs and cause damage.

Most important symptoms and effects, both acute and delayed

Symptoms Skin irritation: May cause allergic skin reaction. Coughing and/ or wheezing; Nausea, Diarrhea, Eye irritation.

Indication of any immediate medical attention and special treatment needed

Self-protection of the first aider Avoid breathing vapors or mists. Avoid contact with skin. Wash contaminated clothing thoroughly with water before removing it and wear gloves.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:
Water spray or fog; Carbon dioxide (CO2), Dry chemical, Foam.

Small Fire Dry chemical or CO2.

Large Fire Water spray or fog; Foam.

Explosive properties: Risk of explosion if heated under confinement: Fire or intense heat may cause violent rupture of packages.

Specific hazards arising from the chemical

Product is or contains a sensitizer. May cause sensitization by skin contact. Thermal decomposition can lead to release of irritating and toxic gases and vapors. Runoff may pollute waterways.

Hazardous combustion products Carbon monoxide, Carbon dioxide (CO2), Smoke, Volatile organic compounds, Nitrogen oxides (NOx), Oxides of sulfur, Varied particulate matter.

Specific methods:

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge May be ignited by heat, sparks or flames.

Special firefighting procedures:

No action shall be taken involving any personal risk without suitable training. Evacuate surrounding areas. Dike to collect large liquid spills. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. The product is insoluble and floats on water. Water mist may be used to cool closed containers. Keep exposed unopened containers cool to prevent rupture. Do not use a solid water stream as it may scatter and spread fire. Move containers from fire area if you can do it without risk. Avoid spreading burning liquid with water used for cooling purposes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions: Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protective equipment. See Section 8 for information on appropriate personal protective equipment. Contaminated surfaces will be extremely slippery.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions: Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so. Dike far ahead of spill; use dry sand to contain the flow of material. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

Methods for clean-up: Clean-up methods - small spillage: Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to state, local, federal regulations. Clean-up methods - large spillage: Keep unnecessary personnel away. Dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Avoid contact of spilled material with soil and prevent runoff entering surface waterways.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling: Protect from physical damage. Use personal protective equipment as required. Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. Ensure adequate

ventilation. Do not store at temperatures above 113°F (45°C). Take precautionary measures against static discharge.

Conditions for safe storage, including any incompatibilities

Technical measures/precautions: Ensure adequate ventilation, especially in confined areas. Eye wash and safety shower should be easily accessible.

Materials to avoid: Oxidizing agents, Strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines .

Chemical Name	ACGIH TLV	OSHA Exposure Limits:	NIOSH IDLH
Polyalphaolefins MIXTURE	-	-	-
Mineral Oil MIXTURE	5 mg/m³ TWA (mist) 10 mg/m³ STEL (mist)	5 mg/m³	-
Substituted thiadiazole CONFIDENTIAL	-	-	-
Heterocyclic Ether CONFIDENTIAL	-	-	-
Fatty acid amide CONFIDENTIAL	-	-	-
Alkaryl amine CONFIDENTIAL	-	-	-
Borate Ester UNKNOWN	-	-	-
Ethoxylated amine CONFIDENTIAL	-	-	-
Diphenylamine 122-39-4	TWA: 10 mg/m³	TWA: 10 mg/m³	TWA: 10 mg/m³
2-Ethylhexyl methacrylate 688-84-6	-	-	-

Appropriate engineering controls

Engineering measures: Ensure adequate ventilation, especially in confined areas. Eye wash and safety shower should be easily accessible.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Chemical resistant apron, Chemical resistant gloves: (consult with the specific manufacturer to confirm performance).

Respiratory protection Ensure adequate ventilation. No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. A respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed whenever workplace conditions warrant a respirator's use.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. Use personal protective equipment as required. When using do not eat, drink or smoke. Keep away from food, drink and animal feeding stuffs. Wash face, hands and any exposed skin thoroughly after handling. Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid		
Appearance	Oil	**Odor**	Bland
Color	Amber, Light, Clear	**Odor threshold**	No information available

Property	**Values**	**Remarks • Method**
pH	N/A	Not applicable
Melting point/freezing point	No information available	
Boiling point / boiling range	>= 290-440 °C / 554-824 °F	(based on components)
Flash point	>= 142 °C / 288 °F	(based on components)
Evaporation rate	No Data Available	No Data Available
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
Upper flammability limit	No Data Available	
Lower flammability limit	No Data Available	
Vapor pressure	No Data Available	
Vapor density	>1 @ Air = 1	Heavier than air
Specific Gravity	0.84	
Water solubility	Insoluble in water	
Solubility in other solvents	No Data Available	
Partition coefficient	No Data Available	
Autoignition temperature	No Data Available	
Decomposition temperature	No Data Available	
Kinematic viscosity	7.0	@ 100 °C
Dynamic viscosity	No Data Available	
Explosive properties	No Data Available	
Oxidizing properties	No Data Available	

Other information

Softening point	No Data Available
Molecular weight	No Data Available
VOC Content (%)	
VOC Content (%)	None
Density	0.84 g/cc
Bulk density	No Data Available

10. STABILITY AND REACTIVITY

Reactivity

Reactivity Stable under normal conditions

Chemical stability

Possibility of Hazardous Reactions None under normal processing

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid

Heat, flames and sparks. Incompatible materials.

Incompatible materials

Materials to avoid: Oxidizing agents, Strong acids.

Hazardous Decomposition Products

Hazardous Decomposition Products Carbon monoxide, Carbon dioxide (CO2), Volatile organic compounds, Nitrogen oxides (NOx), Sulfur oxides (SOx).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information Harmful in contact with skin. Harmful if inhaled. May cause allergic skin reaction. May be fatal if swallowed and enters airways.

Inhalation Harmful if inhaled. Inhalation of oil mists or vapors generated at elevated temperatures may cause respiratory irritation. Avoid breathing vapors or mists.

Eye contact May cause irritation.

Skin Contact Harmful in contact with skin. May cause allergic skin reaction.

Ingestion May be fatal if swallowed and enters airways. Aspiration may cause pulmonary edema and pneumonitis. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Polyalphaolefins MIXTURE	>5000 mg/kg (Rat)	-	1170 mg/m³ (Aerosol)(Rat)
Mineral Oil MIXTURE	25000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	-
Substituted thiadiazole CONFIDENTIAL	-	-	-
Heterocyclic Ether CONFIDENTIAL	-	-	-
Fatty acid amide CONFIDENTIAL	-	-	-
Alkaryl amine CONFIDENTIAL	-	-	-
Borate Ester UNKNOWN	-	-	-
Ethoxylated amine CONFIDENTIAL	-	-	-
Diphenylamine 122-39-4	= 1120 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-
2-Ethylhexyl methacrylate 688-84-6	=16465 mg/kg (Rat)	-	-

Information on toxicological effects

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization Skin Sensitization: May cause allergic skin reaction. Respiratory Sensitization: Not classified.

Mutagenic effects: No data available to indicate product or any components present at or greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by IARC, NTP, or OSHA.

Reproductive toxicity This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies: Diphenylamine (CAS#122-39-4).

STOT - single exposure Not classified.

STOT - repeated exposure Not classified.

Chronic toxicity Prolonged skin contact may defat the skin and produce dermatitis.

Subchronic toxicity No information available.

Target Organ Effects Liver, Kidney, Blood, Respiratory system, Skin.

Neurological effects No information available.

Other adverse effects Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Contains .? Diphenylamine (CAS#122-39-4). May affect: Kidney, Blood, Liver.

Aspiration hazard Risk of serious damage to the lungs (by aspiration).

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 93.77 % of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 2564 mg/kg
ATEmix (dermal) 1978 mg/kg
ATEmix (inhalation-dust/mist) 0.6 mg/l
ATEmix (inhalation-vapor) 2.5 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

94.39 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Mineral Oil MIXTURE	>100: 3d Scenedesmus quadricauda mg/L EC50	>100:4d Fathead Minnow mg/L LC50		>10000: 2d Daphnia magna mg/L EC50
Substituted thiadiazole CONFIDENTIAL	>100: 3d Selenastrum capricornutum mg/L EC50	>1000: 4d Fathead minnow mg/L LC50	>8000: 0.7d Pseudomonas putida mg/L EC50	41: 2d Daphnia magna mg/L EC50
Heterocyclic Ether CONFIDENTIAL	63:3d Scenedesmus quadricauda mg/L EC50	2.4: 4d Rainbow Trout mg/L LC50	10000: 0.1d Sludge mg/L EC50	4.6: 2d Daphnia magna mg/L EC50
Fatty acid amide CONFIDENTIAL	94:4d Selenastrum capricornutum mg/L EC50	>1000: 4d Fathead minnow mg/L LC50	>1000: 0.1d Sludge mg/L EC50	>1000: 2d Daphnia magna mg/L EC50
Alkaryl amine CONFIDENTIAL	600: 3d Selenastrum capricornutum mg/L EC50	>100:4d Zebra Fish mg/L LC50	>1000: 0.1d Sludge mg/L EC50	>100:2d Daphnia magna mg/L EC50
Borate Ester UNKNOWN	>100:3d Selenastrum capricornutum mg/L EC50	>100:4d Rainbow Trout mg/L LC50	>10000:0.1d Sludge mg/L EC50	>100:2d Daphnia magna mg/L EC50
Ethoxylated amine CONFIDENTIAL	0.029: 3d Selenastrum capricornutum mg/L EC50	<1: 4d Not Reported mg/L LC50		<1:2d Daphnia magna mg/L EC50
Diphenylamine 122-39-4	1.5: 72 h Scenedesmus subspicatus mg/L EC50	3.47 - 4.14: 96 h Pimephales promelas mg/L LC50 flow-through		1.69 - 2.46: 48 h Daphnia magna mg/L EC50
2-Ethylhexyl methacrylate 688-84-6		2.78: 4d mg/L Red Killifish LC50		0.105: 21d mg/L Daphnia magna EC50

Persistence and degradability
NOT READILY BIODEGRADABLE.

Bioaccumulation
Bioaccumulative potential.

Mobility
The product is insoluble and floats on water.

Chemical Name	Partition coefficient
Substituted thiadiazole CONFIDENTIAL	9.4
Heterocyclic Ether CONFIDENTIAL	4.1
Fatty acid amide CONFIDENTIAL	45.8
Borate Ester UNKNOWN	9.4
Diphenylamine 122-39-4	3.4
2-Ethylhexyl methacrylate 688-84-6	4.95

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Dispose of in accordance with federal, state and local regulations.

Contaminated packaging Do not reuse container. Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

Federal Regulations

SARA 313

No SARA 313 chemicals are present above the reporting threshold.

Chemical Name	CAS Number	Weight %	SARA 313 - Threshold Values %
Diphenylamine 122-39-4	122-39-4	0.1-0.14	1.0 % de minimis concentration

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

State Regulations (RTK)

California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm:

Chemical Name	CAS Number	California Proposition 65
Toluene	108-88-3	Developmental
Sulfur dioxide	7446-09-5	Developmental
Trimethyl phosphate	512-56-2	Carcinogen
2-Ethoxyethanol	110-80-5	Developmental Male Reproductive
Benzene	71-43-2	Carcinogen Developmental Male Reproductive

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA Rating

Health hazards 1

Flammability 1
Instability 0
Physical and Chemical Properties -
HMIS Rating
Health hazards 1
Flammability 1
Physical hazards 0
Personal protection C

Prepared by	Environmental Health and Safety Department
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Revision Note
This data sheet contains changes from the previous version in section(s): 11, 15.

Disclaimer
The information provided in this Material Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet