



# SAFETY DATA SHEET

## 1. Product Identification

Champion Brands, LLC  
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**Product line:** CHAMPION® TO-4 Transmission Series  
**Products:** 4313, 4345, 4311, 4287  
**CAS:** Not applicable (Mixture)  
**Synonyms:** SuperGrade Torque Fluid  
**Recommended use:** Powershift transmission lubricant  
**Restrictions:** None determined  
**Created:** 16 September 2013  
**Revised:** 17 September 2013  
**Emergency phone:** CHEMTREC: (+1) 800-424-9300

## 2. Hazards Identification

**Appearance:** Pale yellow to golden brown liquid  
**Odor:** Mild petroleum  
**Classification:** None  
**Target organs:** Not Determined  
**Symbol(s):**  
**Signal Word:** None  
**Hazard Statement(s):** None  
**Other hazard(s):** Product will burn, though difficult to ignite. This product produces oil sheen on bodies of water. Mists of sprays of this product may be harmful if inhaled. Product contains components which are harmful to aquatic environment, but at concentrations below GHS classification criteria.  
**Precaution(s):** Avoid breathing vapors/mist/spray. Wear protective gloves/protective clothing/eye protection. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment.  
**Disposal:** Keep out of waterways. Check local, national, and international regulations for proper disposal

### 3. Composition/Information on Ingredients

#### Hazardous Ingredients:

<i>Component</i>	<i>CAS No.</i>	<i>Conc (wt%)</i>
Mineral oil	Mixture	90 – 100
Calcium long-chain alkylphenate sulfide	Proprietary	1 – 2
Zinc dialkyl dithiophosphate	Proprietary	< 1
Substituted polyolefine amide alkeneamine	Proprietary	< 1
Phenol, 4-dodecyl	104-43-8	< 1
Zinc alkarylsulfonate	Proprietary	< 1
Alkaryl polyether	Proprietary	< 1
Diphenylamine	122-39-4	< 0.1

### 4. First Aid Measures

<b>Eyes</b>	Flush eyes with running water for at least 15 minutes. Get medical attention immediately
<b>Skin</b>	Flush exposed area with running water for at least 15 minutes. Remove contaminated clothing and launder before reuse. Get medical attention if irritation develops or if signs of an allergic reaction appear.
<b>Inhalation</b>	Move to fresh air. If nausea or other symptoms persist, get medical attention. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and get medical attention immediately.
<b>Ingestion</b>	DO NOT INDUCE VOMITING. If vomiting occurs spontaneously, lower head below hips to reduce risk of aspiration. If conscious, give one glass of water. Get immediate medical attention
<b>Additional Info</b>	Note to physician: Treat symptomatically. Contact poison control for more information.

### 5. Fire Fighting Measures

<b>Flash Point</b>	> 120°C / 248°F (based on flammability of components)
<b>Extinguishing Media</b>	Use water spray, fog, foam, dry chemical or CO <sub>2</sub>
<b>Unsuitable Media</b>	Water jet may cause fire to spread

**Firefighting Procedures:** Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear

**Unusual Hazards** See section 10 for additional information

## 6. Accidental Release Measures

**Personal precautions, protective equipment, and emergency procedures:** Keep unnecessary personnel away. Wear appropriate personal protective equipment for emergency. Ventilate if released in a confined area. Eliminate sources of ignition if it is safe to do so. Wear suitable personal protective equipment and stop the spread of material with adsorbent or socks if safe to do so.

**Environmental precautions:** Avoid release to the environment. Prevent from entering into soil, ditches, sewers, waterways or groundwater. Produces oil sheen on waterways. Toxic to aquatic organisms

**Methods for removal:** Use a pump or bucket to recover free liquid. Residual liquid can be absorbed on inert material. Use non-sparking tools.

## 7. Handling and Storage

**Max. Handling Temp:** 70°C / 158°F

**Procedures:** Open container in a cool, well ventilated area. Avoid breathing vapors. Keep containers closed when not in use. Use appropriate containment to avoid environmental contamination. Avoid use in confined areas without adequate ventilation. Areas of inadequate ventilation could contain concentrations high enough to cause eye irritation, headaches, respiratory discomfort or nausea. Avoid breathing dust, fume, gas, mist, vapors, or spray. Wash thoroughly after handling. Launder contaminated clothing before reuse. Empty container contains product residue which may exhibit hazards of the product. Dispose of packaging or containers in accordance with local, regional, national, and international regulations. Store away from strong oxidizers

**Max Store Temp:** 40°C / 104°F

## 8. Exposure Controls/Personal Protection

### Exposure Limits

#### Guidelines by component

##### *Mineral Oil (mists)*

OSHA TWA:	5 mg/m <sup>3</sup>
ACGIH TWA:	5 mg/m <sup>3</sup>
TWA (Canada)	5 mg/m <sup>3</sup>
STEL (Canada)	10 mg/m <sup>3</sup>
EH40-MEL	5 mg/m <sup>3</sup> , 8 hours
NOHSC	5 mg/m <sup>3</sup> , 8 hours

##### *Diphenylamine*

OSHA TWA:	10 ppm
NIOSH TWA:	10 mg/m <sup>3</sup>
ACGIH TWA:	10 mg/m <sup>3</sup>
NOHSC TWA:	10 mg/m <sup>3</sup> , 8 hours

**Other Exposure Limits:** None known

**Engineering Controls:** Use in a well ventilated area. Where possible, cover sources of oil sprays and mists with adsorbent cloth to minimize exposure to mineral oil mists. Keep concentrations of mist below exposure limits

### Personal Protective Equipment

**Respiratory:** Where mineral oil mists are generated – use full face respirator with organic vapor cartridge.

**Eye:** Wear safety glasses where splashing or splattering may occur

**Gloves:** Use nitrile or neoprene gloves. If material is hot, use appropriately insulated gloves.

**Clothing:** Use neoprene or nitrile gloves. When handling at elevated temperatures, use insulated apron or coat. Launder contaminated clothing before reuse

**Hygiene:** Wash thoroughly after handling this product.

## 9. Physical and Chemical Properties

<b>Appearance</b>	Pale yellow to golden brown liquid
<b>Odor</b>	Mild petroleum
<b>Odor threshold</b>	Not determined
<b>pH</b>	Not determined
<b>Melting Point</b>	Not determined
<b>Initial Boiling Pt/Rng</b>	Not determined
<b>Flash Point</b>	> 120°C / 248°F (estimated based on components)
<b>Evaporation Rate</b>	Nil (where nBuAc = 1)
<b>Upper Flammable Lm</b>	Not determined
<b>Lower Flammable Lm</b>	Not determined
<b>Explosive Data</b>	Not determined
<b>Vapor Pressure</b>	Not determined
<b>Vapor Density</b>	Not determined
<b>Volatile Organics</b>	Not determined
<b>Density</b>	0.9 mg/cu. cm @ 15.6°C
<b>Solubility</b>	Insoluble in water, alcohols; soluble in organics
<b>K<sub>ow</sub></b>	Not determined
<b>Viscosity</b>	Varies; based on SAE viscosity grade
<b>Autoignition Point</b>	Not determined
<b>Decomposition Temp</b>	Not determined

## 10. Stability and Reactivity

<b>Stability</b>	Material is normally stable at normal temperatures and pressures
<b>Decomposition Temp</b>	Not determined
<b>Incompatibility</b>	Oxidizers and reducers
<b>Polymerization</b>	Will not occur
<b>Thermal Decomposition</b>	Smoke, oxides of carbon, nitrogen, phosphorous, boron, sulfur, and metals. May also generate hydrogen sulfide if stored for extended periods of time at elevated temperatures
<b>Conditions to Avoid</b>	Keep away from heat, flames, strong oxidizers and strong reducing agents

## 11. Toxicological Information

### - Acute Exposure -

<b>Eye Irritation</b>	Repeated exposure may cause mild irritation based on data from components. Symptoms may include redness, itchiness, or increased watering of the eyes. Vapors may cause irritation at elevated temperatures
<b>Skin Irritation</b>	Product not considered to be irritating to the skin or to be a skin sensitizer based on data and concentration of

	components. Prolonged exposure may cause dryness or cracking of the skin.
<b>Respiratory Irritation</b>	May cause nose, throat and lung irritation if mists or vapors are inhaled at elevated temperatures.
<b>Dermal Toxicity</b>	Not expected to present a danger of dermal toxicity.
<b>Inhalation Toxicity</b>	Inhalation of this product is not expected to be toxic. Exposure to mineral oil mists may be harmful. Symptoms of over-exposure to mineral oil mists may be similar to that of pneumonia.
<b>Oral Toxicity</b>	Not expected to be harmful. LD50 in rats exceeds 5g/Kg.
<b>Aspiration Hazard</b>	This product does not present a classifiable hazard of aspiration due to viscosity – however, this product may be fatal if swallowed and enters airways, particularly in those with weakened respiratory systems.
	<b>- Chronic Exposure –</b>
<b>Chronic Toxicity</b>	This product contains a component which caused organ effects (adrenal, thyroid, liver, ovary, testes, and bone marrow) and blood cell formation effects when given to rats at large, repeated daily, oral doses.
<b>Carcinogenicity</b>	This product contains mineral oils which are considered to be severely refined and not considered to be carcinogenic under IARC. All of the oils in this product have been demonstrated to contain less than 3% extractables by the IP 346 test.
<b>Mutagenicity</b>	No data available to indicate product or any components at greater than 0.1% are mutagenic or genotoxic.
<b>Reproductive Toxicity</b>	No data available to indicate product or any components at greater than 0.1% may cause reproductive toxicity.
<b>Teratogenicity</b>	This product contains a component which caused teratogenic effects in rats. When pregnant rats were given large, repeated daily, oral doses of this compound, they gave birth to pups with cleft palate and skeletal malformations.

**- Additional Information –**

**Other**

## 12. Ecological Information

	<b>- Environmental Toxicity –</b>
<b>Miscellaneous</b>	No LD/LC/EC50 data was collected for this product. Some components of this product are considered chronic toxicants to aquatic life, though at concentration that is not sufficient to require classification as a marine pollutant or aquatic toxicant.
	<b>- Environmental Fate –</b>
<b>Biodegradation</b>	The petroleum oil in this product is not readily biodegradable, but can be broken down by microorganisms and is therefore

<b>Bioaccumulation</b>	considered to be inherently biodegradable. Some components of this product may persist in the environment. The petroleum oil in this product has a $K_{ow}$ greater than 5.3 and is regarded as having the potential to bioaccumulate. In practice, metabolic processes may reduce this potential.
<b>Soil Mobility</b>	This product is expected to have low soil mobility due to very low water solubility and low vapor pressure. Petroleum oils adsorb to soil and sediment. Once adsorbed, the product is expected to adhere to soil until it is slowly biodegraded.
<b>Other Effects</b>	Product will produce oil sheen and float on the surface of bodies of water. The product will spread across the surface as a function of viscosity and velocities of water and surface wind.

### 13. Disposal Considerations

#### Disposal Considerations

All disposal practices must be in accordance with local, regional, national, and international regulations. Do not dispose in a landfill. Wherever possible, recycle product to used oil collection facilities in accordance with applicable regulations.

#### Contaminated Containers or Packaging

Dispose of packaging or containers in accordance with local, regional, national, and international regulations

### 14. Transportation Information

Description shown may not apply to all shipping situations. Consult applicable shipping codes to determine any additional shipping requirements

**US DOT** Not Regulated

\*If shipped by land in a packaging having a capacity of 3,500 gallons or more, the provisions of 49 CFR, Part 130 apply. (Contains oil)

**UN No** Not applicable

**UN Proper Name** Not applicable

**UN Class** Not applicable

**Packing Group** Not applicable

**Marine Pollutant** No

**IMDG** Not Regulated

\*U.S. DOT compliance requirements may apply. See 49 CFR 171.22, 23 & 25. If transported in bulk by marine vessel in international waters, product is being carried under the scope of MARPOL Annex I (Contains oil)

**ICAO/IATA** Not Regulated

\*U.S. DOT compliance requirements may apply. See 49 CFR 171.22, 23, & 24.

## 15. Regulatory Information

	<b>- Global Chemical Inventories -</b>
<b>USA</b>	All components of this material are on the US TSCA or are exempt
<b>Other TSCA Reg.</b>	None known
<b>EU</b>	Components of this product comply with EU 7 <sup>th</sup> Amendment and are approved for EU sales. Records must be maintained and reported to EU only registrants if product is imported to the EU. Third party importers are asked to report every EU import to Champion Brands, LLC.
<b>New Zealand</b>	All components are listed or exempted
<b>Canada</b>	All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List

### - Other U.S. Federal Regulations -

<b>SARA Ext. Haz. Subst.</b>	This product does not contain greater than 1.0% of any chemical on the SARA Extremely Hazardous Substances list.	
<b>SARA Sect. 311/312</b>	<i>Acute Hazard</i>	- NO
	<i>Chronic Hazard</i>	- YES
	<i>Fire Hazard</i>	- NO
	<i>Reactivity Hazard</i>	- NO

<b>CERCLA</b>	Cadmium 10lbs; arsenic 1lb; lead 1lb; styrene 1000 lbs; ethyl acrylate 1000 lbs.
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### - State Regulations -

<b>CA Prop 65</b>	This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require warning under the statute: <i>Ethyl acrylate, lead, cadmium</i>
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### - Other -

<b><i>Right to Know Component</i></b>	<b><i>Right to Know States</i></b>
Zinc dialkyldithiosphosphate (CAS # 68649-42-3)	NJ, PA
Diphenylamine (CAS # 122-39-4)	NJ, PA, MA

## 16. Other Information

Revision updates may be in many sections and the MSDS should be read in its entirety.  
Prepared according to the UN Globally Harmonized System for the Classification and Labeling of Chemicals (GHS) by Champion LLC, 1001 Golden Drive, Clinton, Missouri 64735.

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