

TriboDyn® Tri-Guard™ 4046RS Compressor Oil

According to Federal Register / Vol. 77, No. 58 / Tuesday, December 29, 2015 / Rules and Regulations / Date of issue: 12/01/2021 Version: 3.0

SECTION 1: Identification

- 1.1. Identification**
 Product Form : Mixture
 Product Name : TriboDyn® Tri-Guard™ 4046 Rotary Screw Synthetic Compressor Oil
- 1.2. Recommended use and restrictions on use**
 Recommended use : Lubricant
 Restrictions on use : No additional information available
- 1.3. Supplier**
 TriboDyn, Inc.
 P.O. Box 117
 Mooresville, NC
 (704)-266-3577
www.tribodyn.com
- 1.4. Emergency telephone number**
 Emergency number : 1-800-424-9300 (CHEMTREC)

SECTION 2: Hazard(s) Identification

2.1 Classification of the substance or mixture

GHS-US classification

Skin Sens. 1	H317	May cause an allergic skin reaction.
Repr. 2	H361	Suspected of damaging fertility or the unborn child.

2.2 GHS Label elements, including precautionary statements.

GHS US Labeling

Hazard Pictograms (GHS US)



Signal Word

Warning

Hazard Statements

H317 - May cause an allergic skin reaction.
 H361 – Suspected of damaging fertility or the unborn child.

Precautionary Statements

Prevention

P201 – Obtain special instructions before use.
 P202 – Do not handle until all safety precautions have been read and understood.
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
 P272 - Contaminated work clothing should not be allowed out of the workplace.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P302+P352 – If on skin: Wash with plenty of soap and water.
 P321 - Specific treatment (see section 4).
 P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
 P363 - Wash contaminated clothing before reuse.

Response

P501- Dispose of contents/container in accordance with local/regional/national/international regulations.

Disposal

2.3 Other hazards not otherwise classified.

No additional information available

2.4 Unknown acute toxicity

Not applicable

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SECTION 3: Composition/Information on Ingredients

Substance/mixture: Mixture

<u>Components Name</u>	<u>CAS number</u>	<u>Weight %</u>
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (DMSO < 3%)	72623-87-1	90 – 95
N-1-naphthylaniline	90-30-2	0.1 - 0.5
Phenothiazine	92-84-2	0.1 - 0.5
O,O,O-triphenyl phosphorothioate	597-82-0	0.1 - 0.5
Additive	Trade Secret	Trade Secret **

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

SECTION 4: First-Aid Measures

4.1. Description of first aid measures

First-aid measures general	Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact	Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash skin thoroughly with mild soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
First-aid measures after eye contact	Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects	Suspected of damaging fertility or the unborn child.
Symptoms/effects after skin contact	May cause an allergic skin reaction.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting Measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	No particular fire or explosion hazard.
Reactivity	No dangerous reactions known.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent firefighting water from entering the environment.
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection. Wear a self-contained breathing apparatus. Wear fire/flame resistant/retardant clothing.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	Do not get in eyes, on skin, or on clothing. Do not breathe vapor. Do not breathe aerosol.
6.1.1. For non-emergency personnel	
Protective equipment	Refer to section 8.2.
Emergency procedures	Evacuate unnecessary personnel.

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6.1.2. For emergency responders

Protective equipment Emergency procedures	Refer to section 8.2. Ventilate area.
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6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment Methods for cleaning up	Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
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6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling & Storage

7.1. Precautions for safe handling

Precautions for safe handling Hygiene measures	Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe aerosol. Do not breathe vapors. Do not get in eyes, on skin, or on clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.
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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Incompatible products Incompatible materials	Keep only in the original container in a cool well ventilated place. Strong bases. Strong acids. Strong oxidizers. Sources of ignition. Direct sunlight.
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SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

N-1-naphthylaniline (90-30-2) Not applicable		
O,O,O-triphenyl phosphorothioate (597-82-0) Not applicable		
Phenothiazine (92-84-2)	Local name	Phenothiazine
ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³
ACGIH	Remark (ACGIH)	Eye photosens; Skin irr
NIOSH	NIOSH REL (TWA) (mg/m ³)	5 mg/m ³

8.2. Appropriate engineering controls

Appropriate engineering controls Environmental exposure controls	Avoid creating mist or spray. Avoid splashing. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide local exhaust ventilation of closed transfer systems to minimize exposures. Avoid release to the environment. Prevent contaminated water run-off. Prevent leakage or spillage.
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8.3. Individual protection measures/Personal protective equipment

Engineering Measures	Use local exhaust ventilation or other engineering controls to minimize exposures and maintain operator comfort. Engineering controls must be designed to meet the OSHA chemical specific standard in 29 CFR 1910. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Facilities storing or using this material should be equipped with an eyewash and safety shower.
Respiratory Protection	Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. Follow a respiratory protection program that meets 29 CFR 1910.134 and ANSI Z88.2 requirements whenever workplace conditions warrant the use of a respirator. Wear a NIOSH approved respirator if any exposure is possible.

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Respirator Type(s)	None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.
Eye Protection	Wear chemically resistant safety glasses with side shields when handling this product. Do not wear contact lenses. Wear goggles and a Face shield.
Skin Protection	Wear protective gloves. Inspect gloves for chemical break-through and replace them at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.
Gloves	Neoprene, Nitrile

SECTION 9: Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	Liquid
Colour	Pale
Odour	Hydrocarbon
Odour threshold	No data available
pH	No data available

Change in Condition

Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	>365°F (>185°C) D92
Flammability (solid, gas)	Non-flammable.

Ignition Temperature

Decomposition temperature	No data available
Auto-ignition temperature	No data available
Danger of Explosion	No data available

Explosion Limits

Vapour pressure	No data available
Relative vapour density at 20 °C	No data available
Relative density	No data available
Solubility in/Miscibility with water	No data available
Log Pow	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Explosive limits	No data available
Explosive properties	No data available
Oxidizing properties	No data available

Viscosity

Viscosity, kinematic	46 mm ² /s @ 40°C
Viscosity, dynamic	No data available

9.2 Other information

No additional information available

SECTION 10: Stability & Reactivity

10.1.	Reactivity	No dangerous reactions known.
10.2.	Chemical stability	Stable under normal conditions
10.3.	Possibility of hazardous reactions	Hazardous polymerization will not occur.
10.4.	Conditions to avoid	Direct sunlight. Extremely high or low temperatures.
10.5.	Incompatible materials	Strong oxidizers. Strong acids. Strong bases.
10.6.	Hazardous decomposition products	Hydrocarbons. Carbon monoxide. Carbon dioxide.

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SECTION 11: Toxicology Information

11.1. Information on toxicological effects

Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified

N-1-naphthylaniline (90-30-2)	
LD50 oral rat	1625 mg/kg
ATE US (oral)	1625 mg/kg bodyweight

O,O,O-triphenyl phosphorothioate (597-82-0)	
LD50 oral rat	> 10000 mg/kg

Phenothiazine (92-84-2)	
LD50 oral rat	1370 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5 mg/l 1 h
ATE US (oral)	1370 mg/kg bodyweight

Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Not classified
Respiratory or skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Suspected of damaging fertility or the unborn child.
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified

N-1-naphthylaniline (90-30-2)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard	Not classified
Viscosity, kinematic	46 mm ² /s @ 40 °C
Likely routes of exposure	Inhalation. Skin and eye contact.
Symptoms/effects	Suspected of damaging fertility or the unborn child.
Symptoms/effects after skin contact	May cause an allergic skin reaction.

SECTION 12: Ecological information

12.1. Toxicity

N-1-naphthylaniline (90-30-2)	
LC50 fish 1	0.44 mg/l 96 h
LC50 fish 2	0.82 mg/l 96 h
Phenothiazine (92-84-2)	
LC50 fish 1	0.597 mg/l 96 h <i>Oncorhynchus mykiss</i>
EC50 crustacea	0.154 mg/l 48 h
ErC50 (algae)	> 0.66 mg/l 72 h

12.2. Persistence and degradability

TriboDyn® Tri-Guard™ 4046 Rotary Screw Synthetic Compressor Oil	
Persistence and degradability	May cause long-term adverse effects in the environment.

N-1-naphthylaniline (90-30-2)	
Biodegradation	0 % 28 d

Phenothiazine (92-84-2)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	0 % 28 d

12.3. Bio accumulative potential

TriboDyn® Tri-Guard™ 4046 Rotary Screw Synthetic Compressor Oil	
Bio accumulative potential	Not established.

N-1-naphthylaniline (90-30-2)	
Log Pow	4.28

12.4. Mobility in soil

Phenothiazine (92-84-2)	
Log Koc	3.76 @ 30 °C

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12.5. Other adverse effects

Other information Avoid release to the environment.

SECTION 13: Disposal Considerations

13.1. Disposal methods

Sewage disposal recommendations	Do not dispose of waste into sewer.
Waste disposal recommendations	Dispose of it in a safe manner in accordance with local/national regulations.
Ecology - waste materials	Avoid release to the environment.

SECTION 14: Transport Information

UN-Number	
DOT, ADN, IMDG, IATA	Non-regulated material
ADR	Non-regulated material
UN proper shipping name	
DOT, ADR, ADN, IMDG, IATA	Non-regulated material
Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATA Class	Non-regulated material
Packing group	
DOT, ADR, IMDG, IATA	Non-regulated material

SECTION 15: Regulatory Information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

15.2. International regulations

CANADA

N-1-naphthylaniline (90-30-2) Listed on the Canadian DSL (Domestic Substances List) inventory.

O,O,O-triphenyl phosphorothioate (597-82-0) Listed on the Canadian DSL (Domestic Substances List) inventory.
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Phenothiazine (92-84-2) Listed on the Canadian DSL (Domestic Substances List) inventory.
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EU-Regulations


N-1-naphthylaniline (90-30-2) Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

O,O,O-triphenyl phosphorothioate (597-82-0) Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
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National regulations

No additional information available

15.3. US State regulations

 **WARNING:** This product can expose you to Aniline, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

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SECTION 16: Regulatory Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create a warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine the applicability of this information and the suitability of the material or product for any particular purpose.

Date of preparation / last revision 08/02/2023 / 2

Abbreviations and acronyms DOT:US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)

NFPA Ratings:

Health: 2 Materials that, under emergency conditions can cause temporary incapacitation
Fire: 1 Materials that must be preheated before ignition can occur
Reactivity: 0 Normally stable, even under fire exposure conditions and not reactive with water.

KEY: 0 - Least
1 - Slight
2 - Moderate
3 - High
4 - Extreme

