

# TriboDyn® Tri-Ex 5W-40 HD FS Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Date of issue: 02/18/2016 Version: 1.0

**SECTION 1: Identification** 

1.1. Identification

Product Form :Mixture

Product Name :TriboDyn® Tri-Ex 5W-40 Heavy Duty Full Synthetic Motor 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

Classification of the substance or mixture the substance is not classified according to the Globally Harmonized System (GHS).

#### 2.1 Label Elements

GHS label elements
Hazard pictograms
Signal word
Hazard statements
Signal word
Hazard statements
Signal word
Hazard statements
Signal word
Non-regulated material
Non-regulated material

#### 2.2 Classification System

NFPA ratings (scale 0-4) Health=0; Fire=1; Reactivity=0 HMIS-ratings (scale 0 - 4) Health=0; Fire=1; Reactivity=0





#### **SECTION 3: Composition/Information on Ingredients**

Components not listed are not physical or health hazards as defined in 29 CFR 1910.1200 (Hazard Communication Standard).

Name	Product identifier	%	GHS-US classification
Petroleum distillates, solvent dewaxed	0.47.40.05.0	0.7	
Dewaxed heavy paraffinic	64742-65-0	3-7	No Data Available
Phenol, (tetrapropenyl) derivatives	74499-35-7	0.1-1	No Data Available

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#### **SECTION 4: First-Aid Measures**

#### 4.1 Description of first aid measures

General information :No special measures required

After inhalation :Supply fresh air; consult doctor in case of complaints
After skin contact :Generally, the product does not irritate the skin

After eye contact :Rinse opened eye for several minutes under running water

After swallowing Treat symptomatically.

Most important symptoms and effects,

both acute and delayed :No further relevant information available

Indication of any immediate medical

attention and special treatment needed :No further relevant information available

#### **SECTION 5: Fire-fighting Measures**

#### 5.1 Suitable (and unsuitable) extinguishing media

Suitable extinguishing agents :Use alcohol resistant foam, carbon dioxide, or dry chemical when fighting fires.

Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the surface of the fire. Do not direct a

:Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

stream of water into the hot burning liquid.

Special hazards arising from the

substance or mixture :Material may be ignited only if preheated to temperatures above the high flash

point, for example in a fire.

5.2 Advise for Firefighters

Protective equipment :Do not enter fire area without proper protection including self- contained

breathing apparatus and full protective equipment. Use methods for the

surrounding fire.

#### **SECTION 6: Accidental Release Measures**

#### Personal precautions, protective equipment and emergency procedures

General Measures: No data available

#### **Environmental precautions**

Do not flush to sewer.

Avoid runoff into storm sewers and ditches that lead to waterways.

Remove from water surface by skimming or with suitable absorbents. Do not use dispersants.

#### Methods and material for containment and cleaning up

**Methods for cleaning up**: Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Dispose of according to Federal, State, Local, or Provincial regulations. Used fluid should be disposed of at a recycling center.

#### Reference to other sections

Follow all protective equipment recommendations provided in Section 8.

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#### **SECTION 7: Handling & Storage**

Precautions for safe handling Information about protection against

explosions and fires

:Harmful or irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Empty containers may retain product residues/ vapors. Use proper bonding and grounding during bulk product transfer. Follow all protective equipment recommendations provided

in Section 8.

Conditions for safe storage, including any incompatibilities :No special measures required

#### Storage 7.1

Requirements to be met by

storerooms and receptacles :No special requirements

Information about storage in one

Common storage facility :Not required

Further information about

storage conditions :None Specific end use(s) :Motor Oil

#### **SECTION 8: Exposure Controls/Personal Protection**

Chemical Componant	OSHA PEL	ACGIH TLV	ACGIH STEL	IDLH
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	5 mg/m3	5 mg/m3	10 mg/m3	No Data Available
Petroleum distillates, hydrotreated heavy paraffinic	5 mg/m3	5 mg/m3	10 mg/m3	No Data Available
Petroleum distillates, solvent dewaxed heavy	5 mg/m3	5 mg/m3	10 mg/m3	No Data Available

#### **Exposure controls**

**Engineering Measures** Respiratory Protection

No engineering controls are likely to be required to maintain operator comfort under normal conditions of use. No respiratory protection required under normal conditions of use.

Respirator Type(s) exposure

None required where adequate ventilation is provided. If airborne concentrations are above the applicable

Eye Protection

limits, use NIOSH/MSHA approved respiratory protection. No special requirements under normal industrial use.

Skin Protection Wash hands

Gloves

Not normally considered a skin hazard. Where use can result in skin contact, practice good personal hygiene.

and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Neoprene, Nitrile

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#### **SECTION 9: Physical & Chemical Properties**

#### 9.1 Information on basic physical and chemical properties

**Appearance** 

Physical state : Liquid
Colour : See product
Odour : Mild

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 : >438°F (>226°C)
Flammability (solid, gas) : Nonflammable.

**Ignition Temperature** 

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

**Explosion Limits** 

Lower : 1 Upper : 10

Vapour pressure : No data available

Relative vapour density at 20 °C : 0.85

Relative density : No data available
Vapor density : No data available
Evaporation rate : No data available
Solubility in/Miscibility with water : Negligible
Partition coefficient (n- : Not determined

octanol/water) Viscosity

Viscosity, kinematic : 81.3

Viscosity, dynamic : Varies with grade Explosive limits : No data available

**Solvent Content** 

Organic solvent : No data available
Other information : No further information

#### **SECTION 10: Stability & Reactivity**

Reactivity :No further relevant information available

Chemical stability :Stable under normal conditions

Thermal decomposition / conditions

to be avoided :No decomposition if used according to specifications

Possibility of hazardous reactions :Hazardous polymerization will not occur

Conditions to avoid :Temperatures above the high flash point of this combustible material

in combination with sparks, open flames, or other sources of ignition. Moisture (will lead to product performance degradation).

Incompatible materials :Strong oxidizing agents

Hazardous decomposition products :Carbon monoxide, smoke

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#### **SECTION 11: Toxicology Information**

**Eye Contact** 

**Ingestion Toxicity** :Likely to be practically non-toxic by ingestion based on animal data.

:Likely to be non-irritating to skin based on animal data. No hazard in normal industrial use. **Skin Contact** 

Absorption :Likely to be practically non-toxic based on animal data.

**Inhalation Toxicity** :No hazard in normal industrial use. Likely to be practically non-toxic based on animal data.

:This material is likely to be non-irritating to eyes based on animal data. No hazard in

normal industrial use.

Sensitization :Non-hazardous under Respiratory Sensitization category. No data available to indicate

product or components may be a skin sensitizer.

Mutagenicity :No data available to indicate product or any components present at greater than 0.1% is

mutagenic or genotoxic.

Carcinogenicity :Not expected to cause cancer. This product meets the IP-346 criteria of <3% PAH's and is

not considered a carcinogen by the International Agency for Research on Cancer.

Reproductive and Developmental Toxicity No data available to indicate product or any components present at greater than 0.1% may

cause birth defects.

:Non-hazardous under Specific Target Organ Systemic Toxicity Single Exposure category. Specific target organ toxicity-Single exposure

:Non-hazardous under Specific Target Organ Systemic Toxicity Repeated Exposure

:No data available. Long-Term (Chronic) Health Effects

Aspiration toxicity :Non-hazardous under Aspiration category.

Other information :No data available.

**Agents Classified by IARC Monographs** 

Not applicable IARC Group 1 Not applicable IARC Group 2A IARC Group 2B Not applicable **National Toxicity Program (NTP) Status** 

Not applicable Known Human Carcinogen

Specific target organ toxicity-Repeated exposure

Not applicable Reasonably Anticipated To Be A Human Carcinogen

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Petroleum distillates, solvent dewaxed		Dermal LD50 Rabbit >	
Dewaxed heavy paraffinic	Oral LD50 Rat > 15000 mg/kg	5000 mg/kg	Inhalation LC50 (4h) Rat = 2.18 mg/L
There are no components that are			_
known or reported to cause cancer			

#### **SECTION 12: Ecological Information**

Chemical Name	CAS#	Aquatic EC50 Crustacea	Aquatic ERC50 Algae	Aquatic LC50 Fish
Petroleum distillates, solvent dewaxed Dewaxed heavy paraffinic	64742-65-0	Aquatic LC50 (48h) > 1000 mg/L	No Data Available	Aquatic LC50 (96h) Rainbow Trout > 5000 mg/L
Petroleum distillates, solvent dewaxed Dewaxed heavy paraffinic	64742-54-7	Aquatic LC50 (48h) > 1000 mg/L	No Data Available	Aquatic LC50 (96h) Rainbow Trout > 5000 mg/L
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	Aquatic EC50 (48h) Daphnia > 1000 mg/L	No Data Available	Aquatic LC50 (96h) > 5000 mg/L

**Toxicity** :Non-hazardous under Aquatic Acute Environment category Aquatic toxicity

:Severe ecological hazard. This product may be toxic to plants and/or

wildlife.

Persistence and degradability :Biodegrades slowly Bioaccumulative potential :Bioconcentration may occur

Mobility in soil :This material is expected to have essentially no mobility in soil. It

absorbs strongly to most soil types.

Additional ecological information

General notes : Not applicable

Results of PBT and vPvB assessment PBT :Not applicable

:Not applicable Other adverse effects :No further relevant information available

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:Non-regulated material

#### **SECTION 13: Disposal Considerations**

**Disposal Methods** 

Dispose of according to Federal, State, Local, or Provincial regulations. Recycle used oil.

Waste Disposal Code(s)

**Waste Description for Spent Product** 

Spent or discarded material is non-hazardous according to environmental regulations.

Contaminated packaging:

Recycle containers whenever possible.

#### **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

Environmental hazards
Marine pollutant :No

Special precautions for user :Not applicable

Transport in bulk according to Annex II

of MARPOL73/78 and the IBC Code :Not applicable

UN "Model Regulation"

#### **SECTION 15: Regulatory Information**

**Chemical Inventories** 

U.S. State Restrictions :Not applicable

WHMIS :Uncontrolled product according to WHMIS classification criteria.

Chemical Name Regulation CAS # %

 None.
 CERCLA

 None.
 SARA 313

 None.
 SARA EHS

 None.
 TSCA 12b

**U.S. State Regulations** 

Chemical Name Regulation CAS # %

California Prop 65-Cancer None. None. California Prop 65- Dev. Toxicity None. California Prop 65-Reprod -fem California Prop 65-Reprod-male None. None. Massachusetts RTK List New Jersey RTK List None. None. Pennsylvania RTK List None. Rhode Island RTK List Minnesota Hazardous None.

**Substance List** 

HMIS Ratings:NFPA Ratings:Health: 0Health: 0Fire: 1Fire: 1Reactivity: 0Reactivity: 0

PPE: B

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

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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 warranty, expressed or implied and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

Date of preparation / last revision 02/08/2020 / 2

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways IMDG: International Maritime Code for Dangerous Goods

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)