

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name: TriboDyn 2-Cycle Premium Synthetic Oil

Product Code: 00C80044

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Two Cycle Engine Oil

Recommended restrictions: Not Suitable for use with Alcohol or Nitro-Methane Fuels

1.3. Details of the supplier of the safety data sheet

Manufacturer: TriboDyn Performance Lubricants
109 Summerville Drive
Mooresville, NC 28115

Issuing date: April 29, 2017

Revision date: April 29, 2017

Revision number: 0

Information Phone: 859-750-6299 - Between 8:00 am & 8:00 pm EST

1.4. Emergency telephone number

Emergency phone number: TriboDyn: +1 (859) 750-6299

International: +01 (859) 750-6299

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Germ Cell Mutagenicity Category 1B

Carcinogenicity Category 1A

Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure Category 1

Hazardous to the aquatic environment - Acute Category 2

Hazardous to the aquatic environment - Chronic Category 2

Acute Toxicity - Inhalation Dust / Mist Category 4

2.2. Label elements

GHS Hazard Symbols



Signal Word

Danger

Hazard Statements

H332 - Harmful if inhaled.

H340 - May cause genetic defects..

H350 - May cause cancer.

H372 - Causes damage to organs through prolonged or repeated exposure.

H401 - Toxic to aquatic life..

H411 - Toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 - Wash exposed areas thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P271 - Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment.

P281 - Use personal protective equipment as required.

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Response	P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P308+P313 - IF exposed or concerned: Get medical advice/attention. P312 - Call a POISON CENTER or doctor/physician if you feel unwell. P314 - Get medical advice/attention if you feel unwell. P391 - Collect spillage.
Storage	P405 - Store locked up.
Disposal	P501- Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other hazards

Hazards not otherwise classified: No data available.

Unknown acute toxicity (GHS-US)

SECTION 3: Composition/information on ingredients

Chemical Name	%	CAS #	GHS Classification
Lubricating oils, petroleum, hydrotreated spent	15 - 40	64742-58-1	Aquatic Chronic 4; H413
Distillates, petroleum, hydrodesulfurized middle	5 - 10	64742-80-9	Aquatic Chronic 2; H411 Asp. Tox. 1; H304 Acute Tox. 4; H332 Carc. 1A; H350 Skin Irrit. 2; H315 STOT RE 2; H373
Distillates, petroleum, hydrodesulfurized light catalytic cracked	5 - 10	68333-25-5	Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Asp. Tox. 1; H304 Acute Tox. 4; H332 Carc. 1A; H350 Skin Irrit. 2; H315 STOT RE 2; H373
Distillates, petroleum, straight-run middle	5 - 10	64741-44-2	Aquatic Chronic 2; H411 Asp. Tox. 1; H304 Acute Tox. 4; H332 Acute Tox. 2; H330 Carc. 2; H351 Flam. Liq. 3; H226 STOT RE 2; H373 STOT SE 3; H335, H336
Kerosene	5 - 10	8008-20-6	Aquatic Chronic 2; H411 Asp. Tox. 1; H304 Flam. Liq. 3; H226 Skin Irrit. 2; H315 STOT SE 3; H335, H336
Residual oils, petroleum, solvent-refined	5 - 10	64742-01-4	Acute Tox. 4; H332 Acute Tox. 3; H331
Kerosine, petroleum, hydrodesulfurized	1 - 5	64742-81-0	Aquatic Chronic 2; H411 Asp. Tox. 1; H304 Flam. Liq. 3; H226 Skin Irrit. 2; H315 STOT SE 3; H335, H336
Light hydrocracked distillate	1 - 5	64741-77-1	Aquatic Chronic 2; H411 Asp. Tox. 1; H304 Acute Tox. 4; H332 Carc. 2; H351 Skin Irrit. 2; H315 STOT RE 2; H373
Naphthalene	0.1 - 1	91-20-3	Aquatic Acute 1; H400 Aquatic Chronic 1; H410

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SECTION 3: Composition/information on ingredients

Acute Tox. 4; H302
Carc. 2; H351
Flam. Sol. 1; H228

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen and get medical attention immediately.
Eyes	Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get medical attention if irritation results. Thermal burns require immediate medical attention.
Skin Contact	Remove contaminated clothing immediately. Wash area of contact thoroughly with soap and water. Get medical attention if irritation persists. High pressure skin injections are serious medical emergencies. Get immediate medical attention. Thermal burns require immediate medical attention. Seek medical advice if symptoms persist.
Ingestion	Seek medical attention immediately or call the Poison control center. Do not induce vomiting. If patient is fully conscious, give up to two glasses of water. Provide medical care provider with this SDS. Contains a harmful substance. Seek medical help immediately and contact a poison information service. Drink two glasses of water or milk to dilute.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms Dizziness, Drowsiness, Severe pulmonary irritation

4.3. Indication of any immediate medical attention and special treatment needed

Note to Doctor Aspiration during swallowing or vomiting may severely damage the lungs. If evacuation of stomach contents is necessary, use method least likely to cause aspiration. In case of ingestion, gastric lavage with activated charcoal can be used promptly to prevent absorption. Consideration should be given to the use of an endotracheal tube, to prevent aspiration. Individuals intoxicated by middle distillates should be hospitalized immediately, with acute and continuing attention to neurologic and cardiopulmonary function. Positive pressure ventilation may be necessary. After the initial episode, individuals should be followed for changes in blood variables and the delayed appearance of pulmonary edema and chemical pneumonitis. Such patients should be followed for several days or weeks for delayed effects, including bone marrow toxicity, hepatic, and renal impairment. Individuals with chronic pulmonary disease will be more seriously impaired, and recovery from inhalation exposure may be complicated. Avoid emesis unless a large amount has been ingested or it contains a toxic additive. Gastric lavage after endotracheal intubation should be reserved for a patient who requires GI decontamination and is lethargic or obtunded. Safe use of activated charcoal and cathartic should be considered if ingested. Mineral oil cathartics should not be given to patients. Saline cathartics or sorbatol is preferable. In case of skin injection, prompt debridement of the wound is necessary to minimize necrosis and tissue loss.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable and Unsuitable Extinguishing Media:

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 stream of water into the hot burning liquid.

5.2. Special hazards arising from the substance or mixture

Fire and/or Explosion Hazards

Material may be ignited only if preheated to temperatures above the high flash point, for example in a fire.

5.3. Advice for firefighters

Fire Fighting Methods and Protection

Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Use methods for the surrounding fire.

Hazardous Combustion Products

Carbon monoxide, Smoke, Hydrogen sulfide, Nitrogen containing gases

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General Measures: No health effects expected from the clean-up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section 8 of this SDS.

6.2. 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.

6.3. 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. P391 - Collect spillage.

6.4. Reference to other sections

Follow all protective equipment recommendations provided in Section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Mildly irritating material. Avoid unnecessary exposure.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool dry place. Isolate from incompatible materials.

Incompatible materials

See Section 10.

7.3. Specific end use(s)

Two Cycle Engine Oil

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Chemical Name

Oil mist, mineral

Oil mist, mineral

Oil mist, mineral

Naphthalene

Naphthalene

Oil mist, mineral

Oil mist, mineral

Kerosene

Occupational Exposure Limits

OSHA PEL

OSHA PEL

OSHA PEL

OSHA PEL

OSHA STEL

ACGIH TLV-TWA

ACGIH TLV-TWA

ACGIH TLV-TWA

Value

5 mg/m³

5 mg/m³

5 mg/m³

10 ppm TWA; 50 mg/m³ TWA

15 ppm STEL; 75 mg/m³ STEL

5 mg/m³

5 mg/m³

200 mg/m³ TWA (application restricted to conditions in which there are negligible aerosol exposures, total hydrocarbon vapor)

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Chemical Name	Occupational Exposure Limits	Value
Oil mist, mineral	ACGIH TLV-TWA	5 mg/m ³
Kerosene, hydrodesulfurized	ACGIH TLV-TWA	200 mg/m ³ TWA (application restricted to conditions in which there are negligible aerosol exposures, total hydrocarbon vapor)
Naphthalene	ACGIH TLV-TWA	10 ppm TWA
Oil mist, mineral	ACGIH STEL	10 mg/m ³
Oil mist, mineral	ACGIH STEL	10 mg/m ³
Oil mist, mineral	ACGIH STEL	10 mg/m ³
Naphthalene	ACGIH STEL	15 ppm STEL
Naphthalene	IDLH	250 ppm IDLH
None.	OSHA PEL-Skin Notation	
Kerosene	ACGIH TLV-Skin Designation	Skin - potential significant contribution to overall exposure by the cutaneous route
Kerosene, hydrodesulfurized	ACGIH TLV-Skin Designation	Skin - potential significant contribution to overall exposure by the cutaneous route
Naphthalene	ACGIH TLV-Skin Designation	Skin - potential significant contribution to overall exposure by the cutaneous route

8.2. Exposure controls

Engineering Measures

Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

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.

Respirator Type(s)

If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Eye Protection

No special requirements under normal industrial use.

Skin Protection

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace 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.

Gloves

Neoprene, Nitrile

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State	Liquid
Color	TriboDyn Blue
Odor	Mild
Odor threshold	Not determined
pH	Not determined
Freezing point	Not determined
Boiling Point	Not determined
Flash Point (°C)	120
Flash Point Method	COC
Evaporation Rate	Not determined
Upper Flammable/Explosive Limit, % in air	5
Lower Flammable/Explosive Limit, % in air	0.7

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Flammability (solid, gas)	Not applicable
Vapor pressure	<0.20
Vapor Density	4.42
Relative Density	0.87
Solubility in Water	Negligible; 0-1%
Octanol/Water Partition Coefficient	Not determined
Autoignition Temperature	Not determined
Decomposition Temperature	Not determined
Viscosity(°C)	49.78
9.2. Other information	
Volatiles, % by weight	0.000000

SECTION 10: Stability and reactivity

10.1. Reactivity	No data available.
10.2. Chemical stability	Stable under normal conditions.
10.3. Possibility of hazardous reactions	Hazardous polymerization will not occur.
10.4. 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).
10.5. Incompatible materials	Strong oxidizing agents
10.6. Hazardous decomposition products	Carbon monoxide, Smoke, Hydrogen sulfide, Nitrogen containing gases

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Ingestion Toxicity	Harmful if swallowed. May cause systemic poisoning. Likely to be practically non-toxic by ingestion based on animal data.
Skin Contact	This material is estimated to be severely irritating (Primary Irritation Index is 6.0 - 6.5 [rabbits]). Contact may result in defatting, redness, itching, inflammation, cracking, and possible secondary infection. High pressure skin injections are Serious Medical Emergencies. Injury may not appear serious at first; within a few hours, tissue will become swollen, discolored and extremely painful (see Notes to Doctor). Contact with heated material may cause thermal burns.
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.
Eye Contact	This material is estimated to be non-irritating eyes (Draize score <15 [rabbits]). Exposure to vapors, fumes or mists may cause irritation contact with heated material may cause thermal burns.
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	Contains a substance that is a probable cancer hazard based on animal studies using doses likely to be encountered in the workplace.
Reproductive and Developmental Toxicity	No data available to indicate product or any components present at greater than 0.1% may cause birth defects.
Specific target organ toxicity-Single exposure	Non-hazardous under Specific Target Organ Systemic Toxicity Single Exposure category.
Specific target organ toxicity-Repeated exposure	H372 - Causes damage to organs through prolonged or repeated exposure.
Long-Term (Chronic) Health Effects	Dizziness, Drowsiness, Severe pulmonary irritation
Aspiration toxicity	Non-hazardous under Aspiration category.
Other information	No data available.

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Agents Classified by IARC Monographs

Benzene	IARC Group 1
Not applicable	IARC Group 2A
Naphthalene	IARC Group 2B
ethylbenzene	IARC Group 2B

National Toxicity Program (NTP) Status

Benzene	Known Human Carcinogen
Naphthalene	Reasonably Anticipated To Be A Human Carcinogen

SECTION 12: Ecological information

12.1. Toxicity

Acute Aquatic ecotoxicity: Non-hazardous under Aquatic Acute Environment category.

Chronic Aquatic ecotoxicity: H411 - Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

Biodegrades at a moderate rate.

12.3. Bioaccumulative potential

Bioconcentration may occur.

12.4. Mobility in soil

This material is expected to have essentially no mobility in soil. It absorbs strongly to most soil types.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

Not determined

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal Methods

Dispose of by incineration following Federal, State, Local, or Provincial regulations.

Waste Disposal Code(s)

Waste Description for Spent Product

Spent or discarded material is not expected to be a hazardous waste.

Contaminated packaging:

Recycle containers whenever possible.

Recycle containers whenever possible.

Recycle containers whenever possible.

SECTION 14: Transport information

DOT Basic Not classified as hazardous for transport (DOT, TDG, IMO/IMDG, IATA/ICAO).

Description

SECTION 15: Regulatory information

Chemical Inventories

U.S. State Restrictions: Not applicable

WHMIS: B4, D2A

Chemical Name	Regulation	CAS #	%
Naphthalene	CERCLA	91-20-3	0.1 - 1
Benzene, dimethyl-	CERCLA	1330-20-7	0.1 - 1
Naphthalene	SARA 313	91-20-3	0.1 - 1
Xylene (mixed isomers)	SARA 313	1330-20-7	0.1 - 1
None.	SARA EHS		
None.	TSCA 12b		

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U.S. State Regulations

Chemical Name	Regulation	CAS #	%
Naphthalene	California Prop 65- Cancer	91-20-3	0.1 - 1
Benzene	California Prop 65- Cancer	71-43-2	0.01 - 0.1
ethylbenzene	California Prop 65- Cancer	100-41-4	0.01 - 0.1
Toluene	California Prop 65- Dev. Toxicity	108-88-3	0.01 - 0.1
Benzene	California Prop 65- Dev. Toxicity	71-43-2	0.01 - 0.1
None.	California Prop 65- Reprod -fem		
Benzene	California Prop 65- Reprod-male	71-43-2	0.01 - 0.1
Kerosine	Massachusetts RTK List	8008-20-6	5 - 10
Naphthalene	Massachusetts RTK List	91-20-3	0.1 - 1
Kerosene	New Jersey RTK List	8008-20-6	5 - 10
Naphthalene	New Jersey RTK List	91-20-3	0.1 - 1
Kerosine	Pennsylvania RTK List	8008-20-6	5 - 10
Naphthalene	Pennsylvania RTK List	91-20-3	0.1 - 1
None.	Rhode Island RTK List		
Naphthalene	Minnesota Hazardous Substance List	91-20-3	0.1 - 1

HMIS Ratings:

Health: 1
Fire: 1
Reactivity: 0
PPE: B

NFPA Ratings:

Health: 1
Fire: 1
Reactivity: 0

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

SECTION 16: Other information

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References
 ACGIH: American Conference of Governmental Industrial Hygienists
 AIHA: American Industrial Hygiene Association
 CFR: Code of Federal Regulations
 DOT: United States Department of Transportation
 GHS: Globally Harmonized System of Classification and Labeling of Chemicals
 HMIS: Hazardous Materials Identification System
 IARC: International Agency for Research on Cancer
 IATA: International Air Transportation Association
 IDLH: Immediately Dangerous to Life or Health
 IMDG: International Maritime Dangerous Goods
 NFPA: National Fire Protection Association
 NIOSH: National Institute for Occupational Safety and Health
 NTP: National Toxicology Program
 OSHA: Occupational Safety and Health Administration
 PEL: Permissible Exposure Limit
 RTK: Right-to-Know
 SARA: Superfund Amendments and Reauthorization Act
 STEL: Short-term Exposure Limit
 TLV: Threshold limit value

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SECTION 16: Other information

TSCA: Toxic Substances Control Act

TWA: Time weighted average

UN: United Nations

WHMIS: Workplace Hazardous Materials Information System

Disclaimer

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