



# Safety Data Sheet

Issuing Date 06-Mar-2014

Revision Date 18-Feb-2015

Version 2

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

### Product identifier

**Product name** Sierra Synthetic Blend TC-W3 Two-Stroke Engine Oil

### Other means of identification

**Product Code(s)** 18-9530-3, 18-9530-3P, 18-9530-6, 18-9530-7

**Synonyms** No information available

### Recommended use of the chemical and restrictions on use

**Recommended Use** Two-stroke Engine Oil.

**Uses advised against** All Other Uses

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

Sierra International  
1 Sierra Place  
Litchfield, IL 62056  
Tel: 217-324-9400

### Emergency telephone number

**Company Emergency Phone Number** (618) 542-5431

**Emergency telephone number** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Specific target organ toxicity (repeated exposure)

Category 1

### Label elements

### EMERGENCY OVERVIEW

**DANGER**

#### **Hazard statements**

Causes damage to organs (central nervous system) through prolonged or repeated exposure.



**Appearance** Amber colored liquid

**Physical state** viscous liquid

**Odor** Mild petroleum odor Petroleum solvent

**Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray  
 Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product

**Precautionary Statements - Response**

Get medical advice/attention if you feel unwell

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)****Other information**

- May be harmful in contact with skin
- Causes mild skin irritation
- Harmful to aquatic life with long lasting effects
- Harmful to aquatic life

Unknown Aquatic Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Common Name** Synthetic hydrocarbon lubricating fluid, Hydrocarbon Lubricating Fluid.  
**Chemical Family** Petroleum hydrocarbon mixture.

Chemical name	CAS-No	Weight %	Trade secret
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	35.2	*
Solvent naphtha (petroleum), medium aliphatic	64742-88-7	25.1	*
Phenol, (dimethylamino)methyl-, polyisobutylene derivs.	Proprietary	5.04-6.29	*
Residual Oils (petroleum), solvent-dewaxed	64742-62-7	5.3	*
Isooctadanoic Acid Reaction Products with Tetraethylenepentamine	68784-17-8	1.26-2.51	*
Diphenylamine	122-39-4	0.01-0.11	*
Naphthalene	91-20-3	0.06	*

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

### 4. FIRST AID MEASURES

**First aid measures**

**General advice** No hazards which require special first aid measures.

**Eye contact** Flush eyes for 30 minutes with water. Get medical attention if irritation persists.

**Skin contact** Remove contaminated shoes and clothing and cleanse affected area(s) thoroughly by washing with mild soap and water or a waterless hand cleaner. If irritation or redness develops and persists, seek medical attention.

**Inhalation** Move exposed persons to fresh air. Consult medical personnel if breathing issues occur.

**Ingestion** Do NOT induce vomiting. Consult a physician.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

### Suitable extinguishing media

Carbon dioxide (CO<sub>2</sub>). Dry chemical. Foam. Water can be used to keep surrounding materials cool.

**Small Fires** Always use personal safety equipment. Follow appropriate personal safety procedures, and extinguishing media.

**Large Fires** Contact emergency personnel.

**Unsuitable extinguishing media** Caution: Use of water spray when fighting fire may be inefficient.

### Specific hazards arising from the chemical

Combustible material.

**Hazardous combustion products** Carbon monoxide. Carbon dioxide (CO<sub>2</sub>).

### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal protection** Avoid contact with the skin and the eyes. Eye protection or face shield should be used if material is used under conditions that increase the chances of splattering. Wash skin with soap and water if contact occurs. Launder soiled clothing. If spilled, take caution, as material can cause surfaces to become very slippery.

**Other information** Small spill: Remove sources of heat or ignition, provide adequate ventilation, contain leak using absorbent, inert, non-combustible material. Large Spill: Contain spill, transfer to secure containers. In the event of an uncontrolled material release, the user should determine if release is reportable under applicable laws and regulations.

**For emergency responders** Clean up area with absorbent material and place in closed containers for disposal.

### Environmental precautions

**Environmental precautions** See Section 12 for additional Ecological Information.

### Methods and material for containment and cleaning up

**Methods for containment** Cover with earth, sand, or other non-combustible material followed with plastic sheets to minimize spreading or contact with rain.

**Methods for cleaning up** Excess liquid material can be collected using a scoop or shovel and stored for recycling or disposal. Prevent material from entering drains or waterways.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Avoid contact with skin, eyes and clothing. Eye protection or face shield should be used if material is used under conditions that increase the chances of splattering. If contact is made, wash skin with soap and water. Launder soiled clothing. Maximum handling temperature is 70 degrees C (158 F). It is recommended to pump or transfer material at ambient temperature.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep away from heat and sources of ignition. Keep containers closed when not in use. Follow first aid measures if contact occurs, and spill procedures if spill occurs. For packaged material: Store in a cool dry area. For bulk material: store in cool dry area. Always follow local, state, and federal guidelines for storage of material for amount stored.

**Incompatible Products** Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Diphenylamine 122-39-4	TWA: 10 mg/m <sup>3</sup>	-	TWA: 10 mg/m <sup>3</sup>
Naphthalene 91-20-3	TWA: 10 ppm	TWA: 10 ppm TWA: 50 mg/m <sup>3</sup>	IDLH: 250 ppm TWA: 10 ppm TWA: 50 mg/m <sup>3</sup> STEL: 15 ppm STEL: 75 mg/m <sup>3</sup>

**Appropriate engineering controls**

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face Protection** If splashes are likely to occur, wear: Goggles. Eye/face Protection.

**Skin and body protection** Long sleeved clothing. Protective gloves can be worn, if material comes in contact with skin wash with soap and water.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Remove and wash contaminated clothing before re-use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Physical state</b>	viscous liquid	<b>Odor</b>	Mild petroleum odor
<b>Appearance</b>	Amber colored liquid	<b>Odor threshold</b>	Petroleum solvent
<b>Color</b>	amber		No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
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pH	No information available	
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
Flash point	98.9 °C / 210 °F	Cleveland open cup (COC)
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific gravity	0.825	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature		
Decomposition temperature	No information available	
Kinematic viscosity	30-40 @40C mm <sup>2</sup> /s	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

**Other information**

Softening point	No information available
VOC Content	No information available
Density	No information available
Bulk density	No information available

## 10. STABILITY AND REACTIVITY

**Reactivity**

No data available

**Chemical stability**

Stable under normal conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
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**Conditions to avoid**

High energy sources of ignition. Excessive heat.

**Incompatible materials**

Strong oxidizing agents.

**Hazardous decomposition products**

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

<b>Product Information</b>	No data available
<b>Inhalation</b>	Inhalation of vapors in high concentration may cause irritation of respiratory system. May cause drowsiness and dizziness based on components.
<b>Eye contact</b>	Avoid contact with eyes. May cause irritation.

**Skin contact** May cause eye/skin irritation. Repeated exposure may cause skin dryness or cracking.

**Ingestion** Do NOT taste or swallow.

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Solvent naphtha (petroleum), medium aliphatic 64742-88-7	> 5000 mg/kg ( Rat )	= 3000 mg/kg ( Rabbit )	> 5.28 mg/L ( Rat ) 4 h
Residual Oils (petroleum), solvent-dewaxed 64742-62-7	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	= 2.18 mg/L ( Rat ) 4 h
Diphenylamine 122-39-4	= 1120 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	-
Naphthalene 91-20-3	= 1110 mg/kg ( Rat ) = 490 mg/kg ( Rat )	(= 1120 mg/kg ( Rabbit ) > 20 g/kg ( Rabbit )	> 340 mg/m <sup>3</sup> ( Rat ) 1 h

#### Information on toxicological effects

**Symptoms** No information available.

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

**Sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** Mineral oils are known to cause cancer because of carcinogenic components (e.g. benzene). The mineral oil in this product is highly refined and should not be considered a carcinogen. Used lubricating oil may contain hazardous components which have the potential to cause skin cancer. Continuous long-term contact with used lubricating oils has caused skin cancer in animal tests. Product contains small quantities of a suspected carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Petroleum distillates, hydrotreated heavy paraffinic 64742-54-7	-	Group 1	-	X
Residual Oils (petroleum), solvent-dewaxed 64742-62-7	-	Group 1	-	X
Naphthalene 91-20-3	-	Group 2A Group 2B	Reasonably Anticipated	X

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

#### Numerical measures of toxicity - Product Information

**Unknown Aquatic Toxicity** 0% 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)** 5251 mg/kg

**ATEmix (dermal)** 4302 mg/kg

**ATEmix (inhalation-dust/mist)** 20.108 mg/l

## 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

Harmful to aquatic life

Harmful to aquatic life with long lasting effects

26.7% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Crustacea
Petroleum distillates, hydrotreated heavy paraffinic 64742-54-7	-	5000: 96 h Oncorhynchus mykiss mg/L LC50	1000: 48 h Daphnia magna mg/L EC50
Solvent naphtha (petroleum), medium aliphatic 64742-88-7	450: 96 h Pseudokirchneriella subcapitata mg/L EC50	800: 96 h Pimephales promelas mg/L LC50 static	100: 48 h Daphnia magna mg/L EC50
Residual Oils (petroleum), solvent-dewaxed 64742-62-7	-	5000: 96 h Oncorhynchus mykiss mg/L LC50	1000: 48 h 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
Naphthalene 91-20-3	0.4: 72 h Skeletonema costatum mg/L EC50	0.91 - 2.82: 96 h Oncorhynchus mykiss mg/L LC50 static 5.74 - 6.44: 96 h Pimephales promelas mg/L LC50 flow-through 1.6: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 1.99: 96 h Pimephales promelas mg/L LC50 static 31.0265: 96 h Lepomis macrochirus mg/L LC50 static	1.09 - 3.4: 48 h Daphnia magna mg/L EC50 Static 1.96: 48 h Daphnia magna mg/L EC50 Flow through 2.16: 48 h Daphnia magna mg/L LC50

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

Chemical name	Partition coefficient
Diphenylamine 122-39-4	3.5
Naphthalene 91-20-3	3.3

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Waste Disposal Method**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Diphenylamine 122-39-4	(hazardous constituent - no waste number)	Included in waste streams: F039, K083, K104	-	-
Naphthalene 91-20-3	waste number U165	Included in waste streams: F024, F025, F034, F039, K001, K035, K060, K087, K145	-	-

  

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes

Naphthalene 91-20-3	-	-	Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	-
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This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste Status
Diphenylamine 122-39-4	Toxic
Naphthalene 91-20-3	Toxic

#### 14. TRANSPORT INFORMATION

**DOT** Not regulated

**IATA** PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER ICAO TI OR IATA DGR

#### 15. REGULATORY INFORMATION

##### International Inventories

<b>TSCA</b>	Does not comply
<b>DSL/NDSL</b>	Does not comply
<b>EINECS/ELINCS</b>	Does not comply
<b>ENCS</b>	Does not comply
<b>IECSC</b>	Does not comply
<b>KECL</b>	Does not comply
<b>PICCS</b>	Does not comply
<b>AICS</b>	Does not comply

##### Legend:

All components are either listed on the US TSCA Inventory, or are not regulated under TSCA.

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

##### U.S. Federal Regulations



**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical name	SARA 313 - Threshold Values %
Diphenylamine - 122-39-4	1.0
Naphthalene - 91-20-3	0.1

**SARA 311/312 Hazard Categories**

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

**Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Naphthalene 91-20-3	100 lb	X	X	X

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Naphthalene 91-20-3	1 lb	-	RQ 1 lb final RQ RQ 0.454 kg final RQ

**U.S. State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical name	California Prop. 65
Naphthalene - 91-20-3	Carcinogen

**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Solvent naphtha (petroleum), medium aliphatic 64742-88-7	X	-	-
Diphenylamine 122-39-4	X	X	X
Naphthalene 91-20-3	X	X	X

**U.S. EPA Label Information**

EPA Pesticide registration number Not Applicable

**16. OTHER INFORMATION**

<b>NFPA</b>	Health hazards 0	Flammability 1	Instability 0	Physical and Chemical Hazards -
<b>HMIS</b>	Health hazards 0	Flammability 1	Physical hazards 0	Personal protection X

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Revision Note

SDS sections updated 1 2 3 5 6 9 11 12 13 14 15 16

**Disclaimer**

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

**End of MSDS**