



Safety Data Sheet

Issuing Date 06-Mar-2014

Revision Date 02-Apr-2014

Version 3

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Code(s) 18-9530-3, 18-9530-3P, 18-9530-6, 18-9530-7
Product name Sierra Synthetic Blend TC-W3 Two-Stroke Engine Oil

Pure substance/mixture Preparation
Contains Solvent naphtha (petroleum), medium aliphatic, Naphtha (petroleum), heavy aromatic

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

Sold to the general public? Yes
Recommended Use Two-stroke Engine Oil
Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Importer	Manufacturer	Supplier
Telmo Control AS P.O. Box 46, Industriveien 1 N-2021 Skedsmokorset, Norway	Sierra International 1 Sierra Place Litchfield, IL 62056 TEL: 217-324-9487	Hicks Oils 845 N. Hickory Street Du Quoin, IL 62832 TEL: 618-542-5431

For further information, please contact

E-mail address postmaster@telmo.no

1.4. Emergency telephone number

Emergency Telephone No information available

Emergency Telephone - §45 - (EC)1272/2008	
Europe	112
Norway	Giftinformasjonen -22591300

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Aspiration toxicity	Category 1 - (H304)
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Classification according to Directive 67/548/EEC or 1999/45/EC

Full text of R-phrases: see section 16

2.2. Label elements

Product identifier
Contains Solvent naphtha (petroleum), medium aliphatic, Naphtha (petroleum), heavy aromatic

**Signal word**

DANGER

Hazard statements

H304 - May be fatal if swallowed and enters airways

Precautionary Statements - EU (§28, 1272/2008)

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

P331 - Do NOT induce vomiting

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

2.3. Other hazards

Other hazards

MAY BE HARMFUL IF SWALLOWED May be harmful in contact with skin

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substances**

Chemical name	EC No	CAS-No	Weight %	Classification according to Directive 67/548/EEC or 1999/45/EC	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Petroleum distillates, hydrotreated heavy paraffinic	265-157-1	64742-54-7	35.1	Carc.Cat.2; R45	Carc. 1B (H350)	No data available
Petroleum distillates, solvent dewaxed heavy paraffinic	265-169-7	64742-65-0	33.83	Carc.Cat.2; R45	Carc. 1B (H350)	01-2119471299
Solvent naphtha (petroleum), medium aliphatic	265-191-7	64742-88-7	25.3	Xn; R65	Asp. Tox. 1 (H304)	No data available
Residual Oils (petroleum), solvent-dewaxed	265-166-0	64742-62-7	5.28	Carc.Cat.2; R45	Carc. 1B (H350)	01-2119480472
Naphthalene	202-049-5	91-20-3	0.06	Xn; R22 Carc.Cat.3; R40 N; R50-53	Acute Tox. 4 (H302) Carc. 2 (H351) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	No data available
Diphenylamine	204-539-4	122-39-4	0.06	T; R23/24/25 R33 N; R50-53	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) STOT RE 2 (H373) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	No data available

Full text of R-phrases: see section 16**Full text of H- and EUH-phrases: see section 16**

Chemical name	CAS-No	SVHC candidates
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	

Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	
Solvent naphtha (petroleum), medium aliphatic	64742-88-7	
Residual Oils (petroleum), solvent-dewaxed	64742-62-7	
Naphthalene	91-20-3	
Diphenylamine	122-39-4	

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice	No hazards which require special first aid measures.
Inhalation	Move exposed persons to fresh air. Consult medical personal if breathing issues occur.
Skin contact	Wash off immediately with soap and plenty of water.
Eye contact	Flush eyes for 30 minutes with water. Get medical attention if irritation persists.
Ingestion	Do NOT induce vomiting. Consult a physician.

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

Symptoms	No information available.
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4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂). 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

No information available

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

Hazardous combustion products Carbon monoxide. Carbon dioxide (CO₂).

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. 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.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

Collect spillage.

6.3. 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.

6.4. Reference to other sections

See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE

7.1. 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.

General Hygiene Considerations

Remove and wash contaminated clothing before re-use.

7.2. 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.

7.3. Specific end use(s)**Risk Management Methods (RMM)**

The information required is contained in this Material Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Chemical name	European Union	United Kingdom	France	Spain	Germany
Naphthalene 91-20-3	-	-	TWA: 10 ppm TWA: 50 mg/m ³	VLA-EC: 15 ppm VLA-EC; 80 mg/m ³ VLA-EC VLA-ED: 10 ppm VLA-ED; 53 mg/m ³ VLA-ED	TWA: 0.1 ppm TWA: 0.5 mg/m ³
Diphenylamine 122-39-4	-	STEL: 20 mg/m ³ TWA: 10 mg/m ³	TWA: 10 mg/m ³	VLA-ED: 10 mg/m ³ VLA-ED	TWA: 5 mg/m ³ Ceiling / Peak: 10 mg/m ³
Chemical name	Italy	Portugal	The Netherlands	Finland	Denmark

Naphthalene 91-20-3	-	STEL: 15 ppm TWA: 10 ppm	STEL: 80 mg/m ³ STEL MAC: 10 ppm MAC; 50 mg/m ³ MAC	TWA: 1 ppm TWA: 5 mg/m ³ STEL: 10 mg/m ³ STEL: 2 ppm	TWA: 10 ppm TWA: 50 mg/m ³
Diphenylamine 122-39-4	-	TWA: 10 mg/m ³	MAC: 0.7 mg/m ³ MAC	TWA: 5 mg/m ³ STEL: 10 mg/m ³	TWA: 5 mg/m ³
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Naphthalene 91-20-3	Skin MAK: 10 ppm MAK; 50 mg/m ³ MAK	-	NDSch: 50 mg/m ³ NDS: 20 mg/m ³ Skin	TWA: 10 ppm TWA: 50 mg/m ³ STEL: 20 ppm STEL: 75 mg/m ³	TWA: 10 ppm TWA: 50 mg/m ³ STEL: 15 ppm STEL: 75 mg/m ³
Diphenylamine 122-39-4	Skin STEL 1.4 ppm STEL (inhalable fraction); 10 mg/m ³ STEL (inhalable fraction) MAK: 0.7 ppm MAK (inhalable fraction); 5 mg/m ³ MAK (inhalable fraction)	-	-	TWA: 5 mg/m ³ STEL: 10 mg/m ³	TWA: 10 mg/m ³ STEL: 20 mg/m ³

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face Protection

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

Skin and body protection

Suitable protective clothing.

Environmental exposure controls No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	viscous liquid	Odor	Mild petroleum odor
Appearance	Amber colored liquid		Petroleum solvent
Color	amber	Odor threshold	No information available
Property	Values	Remarks • Method	
pH		No information available	
Melting point/freezing point		No information available	
Boiling Point/Range		No information available	
Flash point	98.9 °C / 210 °F	No information available	
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	No information available	
Water solubility		No information available	
Solubility in other solvents		No information available	
Partition coefficient		No information available	
Autoignition temperature		No information available	
Decomposition temperature		No information available	
Kinematic viscosity	7.8 @100C mm ² /s	No information available	
Dynamic viscosity		No information available	

Explosive properties No information available
Oxidizing properties No information available

9.2. Other information

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

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

10.3. Possibility of hazardous reactions

Hazardous polymerization

Hazardous polymerization does not occur.

Possibility of Hazardous Reactions

None under normal processing.

10.4. Conditions to avoid

High energy sources of ignition. Excessive heat.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

None under normal use conditions.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Product Information

Product does not present an acute toxicity hazard based on known or supplied information.

Inhalation Inhalation of vapors in high concentration may cause irritation of respiratory system.
Eye contact Avoid contact with eyes. May cause irritation.
Skin contact Prolonged skin contact may defat the skin and produce dermatitis. May cause eye/skin irritation.
Ingestion Do NOT taste or swallow.

Unknown Acute 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) 3,286.00

ATEmix (dermal) 2,196.00
ATEmix (inhalation-dust/mist) 20.87

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Solvent naphtha (petroleum), medium aliphatic	> 5000 mg/kg (Rat)	= 3000 mg/kg (Rabbit)	> 5.28 mg/L (Rat) 4 h
Residual Oils (petroleum), solvent-dewaxed	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 2.18 mg/L (Rat) 4 h
Naphthalene	= 490 mg/kg (Rat)	> 20 g/kg (Rabbit)	> 340 mg/m ³ (Rat) 1 h
Diphenylamine	= 1165 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Chemical name	European Union
Petroleum distillates, hydrotreated heavy paraffinic	Carc. 1B
Petroleum distillates, solvent dewaxed heavy paraffinic	Carc. 1B
Residual Oils (petroleum), solvent-dewaxed	Carc. 1B
Naphthalene	Carc. 2 Carc. 1B

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

0% 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	-	5000: 96 h Oncorhynchus mykiss mg/L LC50	1000: 48 h Daphnia magna mg/L EC50
Petroleum distillates, solvent dewaxed heavy paraffinic	-	5000: 96 h Oncorhynchus mykiss mg/L LC50	1000: 48 h Daphnia magna mg/L EC50
Solvent naphtha (petroleum), medium aliphatic	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	-	5000: 96 h Oncorhynchus mykiss mg/L LC50	1000: 48 h Daphnia magna mg/L EC50
Naphthalene	-	5.74 - 6.44: 96 h Pimephales promelas mg/L LC50 flow-through 1.6: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.91 - 2.82: 96 h Oncorhynchus mykiss mg/L LC50 static 1.99: 96 h Pimephales promelas mg/L LC50 static 31.0265: 96 h Lepomis macrochirus mg/L LC50 static	2.16: 48 h Daphnia magna mg/L LC50 1.96: 48 h Daphnia magna mg/L EC50 Flow through 1.09 - 3.4: 48 h Daphnia magna mg/L EC50 Static
Diphenylamine	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

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

Chemical name	Partition coefficient
Naphthalene	3.3
Diphenylamine	3.5

12.4. Mobility in soil**Mobility in soil**

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods**Waste from residues/unused products**

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

Contaminated packaging

Improper disposal or reuse of this container may be dangerous and illegal.

Section 14: TRANSPORT INFORMATION

IMDG/IMO

14.1 UN-No	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing group	Not regulated
14.5 Marine pollutant	Not Applicable
14.6 Special Provisions	None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available

RID

14.1 UN-No	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing group	Not Applicable
14.5 Environmental Hazard	Not Applicable
14.6 Special Provisions	None

ADR

14.1 UN-No	Not regulated
14.2 Proper shipping name	Not regulated

14.3 Hazard Class	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental Hazard	Not Applicable
14.6 Special Provisions	None

ICAO

14.1 UN-No	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental Hazard	Not Applicable
14.6 Special Provisions	None

IATA

14.1 UN-No	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental Hazard	Not Applicable
14.6 Special Provisions	None

Section 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Does not comply
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

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

15.2. Chemical safety assessment

No information available

Section 16: OTHER INFORMATION**Key or legend to abbreviations and acronyms used in the safety data sheet**

Full text of R-phrases referred to under sections 2 and 3

No information available

Full text of H-Statements referred to under section 3

H301 - Toxic if swallowed

H311 - Toxic in contact with skin

H331 - Toxic if inhaled

H373 - May cause damage to organs through prolonged or repeated exposure if inhaled

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

H350 - May cause cancer if swallowed

H302 - Harmful if swallowed

H351 - Suspected of causing cancer if inhaled

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value		

Issuing Date 06-Mar-2014**Revision Date** 02-Apr-2014**Reason Note** (M)SDS sections updated, 2, 16.**This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006****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 Safety Data Sheet