Safety Data Sheet

Issuing Date 06-Mar-2014 **Revision Date** 03-Apr-2014 **Version** 3

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

1.1. Product identifier

Product Code(s) 18-9540-2, 18-9540-2R, 18-9540-3, 18-9540-3R, 18-9540-4R, 18-9540-7
Product name Sierra Full Synthetic 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
Telmo Control AS
P.O. Box 46, Industriveien 1
N-2021 Skedsmokorset, Norway

Manufacturer
Sierra International
1 Sierra Place
Litchfield, IL 62056
TEL: 217-324-9487

Supplier
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)

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 Harmful to aquatic life

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	35.5	Carc.Cat.2; R45	Carc. 1B (H350)	No data available
Petroleum distillates, solvent dewaxed heavy paraffinic	265-169-7	64742-65-0	34.22	Carc.Cat.2; R45	Carc. 1B (H350)	01-2119471299
Solvent naphtha (petroleum), medium aliphatic	265-191-7	64742-88-7	24.43	Xn; R65	Asp. Tox. 1 (H304)	No data available
Residual Oils (petroleum), solvent-dewaxed	265-166-0	64742-62-7	5.35	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
Xylene	215-535-7	1330-20-7	0.003	R10 Xn; R20/21 Xi; R38	Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Flam. Liq. 3 (H226)	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	
Xylene	1330-20-7	

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.

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

Notes to Physician Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media
Carbon dioxide (CO_2). 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 (CO_2).

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 guidlines 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/m³	VLA-EC: 15 ppm VLA-EC; 80 mg/m³ VLA-EC VLA-ED: 10 ppm VLA-ED; 53 mg/m³ VLA-ED	TWA: 0.1 ppm TWA: 0.5 mg/m³

Diphenylamine 122-39-4	-	STEL: 20 mg/m³ TWA: 10 mg/m³	TWA: 10 mg/m³	VLA-ED: 10 mg/m³ VLA-ED	TWA: 5 mg/m³ Ceiling / Peak: 10 mg/m³
Xylene 1330-20-7	-	STEL: 100 ppm STEL: 441 mg/m³ TWA: 220 mg/m³ TWA: 50 ppm Skin	TWA: 50 ppm TWA: 221 mg/m³ TWA: 1000 mg/m³ STEL: 100 ppm STEL: 442 mg/m³ STEL: 1500 mg/m³	S* VLA-EC: 100 ppm VLA-EC; 442 mg/m³ VLA-EC VLA-ED: 50 ppm VLA-ED; 221 mg/m³ VLA-ED	TWA: 100 ppm TWA: 440 mg/m³ Ceiling / Peak: 200 ppm Ceiling / Peak: 880 mg/m³
Chemical name	**Italy**	**Portugal**	**The Netherlands**	**Finland**	**Denmark**
Naphthalene 91-20-3	-	STEL: 15 ppm TWA: 10 ppm	STEL: 80 mg/m³ STEL MAC: 10 ppm MAC; 50 mg/m³ MAC	TWA: 1 ppm TWA: 5 mg/m³ STEL: 10 mg/m³ STEL: 2 ppm	TWA: 10 ppm TWA: 50 mg/m³
Diphenylamine 122-39-4	-	TWA: 10 mg/m³	MAC: 0.7 mg/m³ MAC	TWA: 5 mg/m³ STEL: 10 mg/m³	TWA: 5 mg/m³
Xylene 1330-20-7	TWA: 221 mg/m³ TWA: 50 ppm STEL: 100 ppm STEL: 442 mg/m³ Skin	STEL: 150 ppm TWA: 100 ppm	Skin STEL: 100 ppm STEL; 442 mg/m³ STEL MAC: 50 ppm MAC; 210 mg/m³ MAC	TWA: 50 ppm TWA: 220 mg/m³ STEL: 100 ppm STEL: 440 mg/m³ Skin	TWA: 109 mg/m³ TWA: 25 ppm Skin
Chemical name	**Austria**	**Switzerland**	**Poland**	**Norway**	**Ireland**
Naphthalene 91-20-3	Skin MAK: 10 ppm MAK; 50 mg/m³ MAK	-	NDSCh: 50 mg/m³ NDS: 20 mg/m³ Skin	TWA: 10 ppm TWA: 50 mg/m³ STEL: 20 ppm STEL: 75 mg/m³	TWA: 10 ppm TWA: 50 mg/m³ STEL: 15 ppm STEL: 75 mg/m³
Diphenylamine 122-39-4	Skin STEL 1.4 ppm STEL (inhalable fraction); 10 mg/m³ STEL (inhalable fraction) MAK: 0.7 ppm MAK (inhalable fraction); 5 mg/m³ MAK (inhalable fraction)	-	-	TWA: 5 mg/m³ STEL: 10 mg/m³	TWA: 10 mg/m³ STEL: 20 mg/m³
Xylene 1330-20-7	Skin STEL 100 ppm STEL; 442 mg/m³ STEL (all isomers) MAK: 50 ppm MAK; 221 mg/m³ MAK (all isomers)	STEL: 200 ppm STEL: 870 mg/m³	NDSCh: 350 mg/m³ NDS: 100 mg/m³	TWA: 108 mg/m³ TWA: 25 ppm Skin STEL: 135 mg/m³ STEL: 37.5 ppm	TWA: 221 mg/m³ TWA: 50 ppm STEL: 100 ppm STEL: 442 mg/m³ Skin

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

Appearance	Red Colored Liquid	**Odor**	Mild petroleum odor Petroleum solvent
Color	red	**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	117.2 °C / 243 °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	0.841	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	6.2@100C mm2/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

Strong oxidizing agents.

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 May cause eye/skin irritation. Prolonged skin contact may defat the skin and produce dermatitis.

Ingestion Do NOT taste or swallow.

Unknown Acute Toxicity 0.007% 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) 3,273.00

ATEmix (dermal) 2,189.00

ATEmix (inhalation-dust/mist) 21.61

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)	
Xylene	= 4300 mg/kg (Rat) = 4820 mg/kg (Rat)	> 1700 mg/kg (Rabbit) > 2000 mg/kg (Rabbit)	= 47635 mg/L (Rat) 4 h = 5000 ppm (Rat) 4 h > 5.04 mg/L (Rat) 4 h

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
Xylene	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

0.007% of the mixture consists of components(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
Xylene	11: 72 h Pseudokirchneriella subcapitata mg/L EC50	13.4: 96 h Pimephales promelas mg/L LC50 flow-through 2.661 - 4.093: 96 h Oncorhynchus mykiss mg/L LC50 static 13.5 - 17.3: 96 h Oncorhynchus mykiss mg/L LC50 13.1 - 16.5: 96 h Lepomis macrochirus mg/L LC50 flow-through 19: 96 h Lepomis macrochirus mg/L LC50 7.711 - 9.591: 96 h Lepomis macrochirus mg/L LC50 static 23.53 - 29.97: 96 h Pimephales promelas mg/L LC50 static 780: 96 h Cyprinus carpio mg/L LC50 semi-static 780: 96 h Cyprinus carpio mg/L LC50 30.26 - 40.75: 96 h Poecilia reticulata mg/L LC50 static	3.82: 48 h water flea mg/L EC50 0.6: 48 h Gammarus lacustris mg/L LC50

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
Xylene	2.77 - 3.15

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	Does not comply

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
H312 - Harmful in contact with skin
H332 - Harmful if inhaled
H315 - Causes skin irritation
H350 - May cause cancer if swallowed
H304 - May be fatal if swallowed and enters airways
H226 - Flammable liquid and vapor
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	03-Apr-2014
Reason Note	(M)SDS sections updated, 2, 3, 9, 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