# TURBOFLO TM/MC R&O 100



#### 000003001153

Version 2.6 Revision Date 2022/08/15 Print Date 2022/08/15

#### **SECTION 1. IDENTIFICATION**

Product name : TURBOFLO TM/MC R&O 100

Product code : TFRO100P5R, TFRO100P20, TFRO100DRR,

TFRO100DRM, TFRO100DCT, TFRO100, TFRO100BLK

Manufacturer or supplier's details

Petro-Canada America Lubricants LLC 2828 N. Harwood St., Suite 1300

Dallas TX 75201 United States

Telephone: 1-214-871-3555

**Emergency telephone number** 

Emergency telephone : CHEMTREC: 1-800-424-9300;

number Poison Control Centre: Consult local telephone directory for

emergency number(s).

Recommended use of the chemical and restrictions on use

Recommended use : Turboflo R&O are fluids formulated to have long service life

and provide corrosion and oxidation resistance in a wide range of applications. Primarily recommended as circulating

oil for various industrial machinery.

Prepared by : Product Safety: +1 905-491-0565

#### **SECTION 2. HAZARDS IDENTIFICATION**

# GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a hazardous substance or mixture.

**GHS** label elements

Not a hazardous substance or mixture.

Other hazards

None known.

IARC No component of this product present at levels greater than

or equal to 0.1% is identified as probable, possible or

confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or

equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No component of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

# **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

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#### Components

Chemical name	CAS-No.	Concentration (% w/w)
Distillates (petroleum), hydrotreated heavy	64742-54-7	70 - 90
paraffinic; Baseoil — unspecified		
Lubricating oils (petroleum), C20-50,	72623-85-9	70 - 90
hydrotreated neutral oil-based, high-		
viscosity; Baseoil — unspecified		
Lubricating oils (petroleum), C20-50,	72623-87-1	10 - 20
hydrotreated neutral oil-based; Baseoil —		
unspecified		

Actual concentration is withheld as a trade secret

#### **SECTION 4. FIRST AID MEASURES**

If inhaled : Move to fresh air.

Artificial respiration and/or oxygen may be necessary.

Seek medical advice.

In case of skin contact : In case of contact, immediately flush skin with plenty of water

for at least 15 minutes while removing contaminated clothing

and shoes.

Wash skin thoroughly with soap and water or use recognized

skin cleanser.

Wash clothing before reuse.

Seek medical advice.

In case of eye contact : Remove contact lenses.

Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes. Obtain medical attention.

If swallowed : Rinse mouth with water.

DO NOT induce vomiting unless directed to do so by a

physician or poison control center.

Never give anything by mouth to an unconscious person.

Seek medical advice.

Most important symptoms and effects, both acute and

delayed

First aider needs to protect himself.

#### **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Unsuitable extinguishing

media

No information available.

Specific hazards during

firefighting

: Cool closed containers exposed to fire with water spray.

Hazardous combustion

products

Carbon oxides (CO, CO2), nitrogen oxides (NOx), sulphur oxides (SOx), smoke and irritating vapours as products of

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incomplete combustion.

Further information Prevent fire extinguishing water from contaminating surface

water or the ground water system.

### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

Ensure adequate ventilation. Evacuate personnel to safe areas. Material can create slippery conditions.

Mark the contaminated area with signs and prevent access to

unauthorized personnel.

Only qualified personnel equipped with suitable protective

equipment may intervene.

**Environmental precautions** 

If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods and materials for containment and cleaning up Prevent further leakage or spillage if safe to do so.

Remove all sources of ignition.

Soak up with inert absorbent material. Non-sparking tools should be used. Ensure adequate ventilation. Contact the proper local authorities.

### **SECTION 7. HANDLING AND STORAGE**

Advice on protection against : None known.

fire and explosion

Advice on safe handling For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the

application area.

In case of insufficient ventilation, wear suitable respiratory

equipment.

Avoid contact with skin, eyes and clothing.

Do not ingest.

Keep away from heat and sources of ignition. Keep container closed when not in use.

Conditions for safe storage Store in original container.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage.

Keep in a dry, cool and well-ventilated place.

Keep in properly labelled containers.

To maintain product quality, do not store in heat or direct

sunlight.

### **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### Components with workplace control parameters

Components	CAS-No.	Value type	Control	Basis
		(Form of	parameters /	

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		exposure)	Permissible concentration	
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified	64742-54-7	TWA (Inhalable particulate matter)	5 mg/m3	ACGIH
		TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Mist)	5 mg/m3	OSHA P0
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, high-viscosity; Baseoil — unspecified	72623-85-9	TWA (Inhalable particulate matter)	5 mg/m3	ACGIH
·		TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Mist)	5 mg/m3	OSHA P0
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil — unspecified	72623-87-1	TWA (Inhalable particulate matter)	5 mg/m3	ACGIH
		TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Mist)	5 mg/m3	OSHA P0
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL

**Engineering measures** 

No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### Personal protective equipment

Respiratory protection Use respiratory protection unless adequate local exhaust

ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe

working limits of the selected respirator.

Filter type organic vapour filter

Hand protection

Material neoprene, nitrile, polyvinyl alcohol (PVA), Viton®.

Remarks Chemical-resistant, impervious gloves complying with an

> approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is

necessary.

Eye protection Wear face-shield and protective suit for abnormal processing

problems.

Skin and body protection Choose body protection in relation to its type, to the

concentration and amount of dangerous substances, and to

the specific work-place.

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Protective measures Wash contaminated clothing before re-use.

Hygiene measures Remove and wash contaminated clothing and gloves,

including the inside, before re-use.

Wash face, hands and any exposed skin thoroughly after

handling.

#### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance** : viscous liquid

Colour Pale, straw-yellow.

Odour Mild petroleum oil like.

Odour Threshold No data available

No data available pΗ

Pour point -24 °C (-11 °F) Boiling point/boiling range No data available

Flash point 262 °C (504 °F)

Method: Cleveland open cup

Fire Point 298 °C (568 °F)

Evaporation rate : No data available

Flammability Low fire hazard. This material must be heated before ignition

will occur.

: No data available **Auto-Ignition Temperature** 

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower : No data available

flammability limit

Vapour pressure No data available No data available Relative vapour density

Relative density No data available

Density : 0.8696 kg/l (15 °C / 59 °F)

Solubility(ies)

Water solubility insoluble

Partition coefficient: n-

octanol/water

: No data available

Viscosity

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Viscosity, kinematic : 94.3 cSt (40 °C / 104 °F)

11.1 cSt (100 °C / 212 °F)

Explosive properties : Do not pressurize, cut, weld, braze, solder, drill, grind or

expose containers to heat or sources of ignition.

#### **SECTION 10. STABILITY AND REACTIVITY**

Possibility of hazardous

reactions

: Hazardous polymerisation does not occur.

Stable under normal conditions.

Conditions to avoid : No data available

Incompatible materials : Reactive with oxidising agents, reducing agents, alkali metals,

acids and alkalis.

Hazardous decomposition

products

May release COx, methacrylate monomers, smoke and

irritating vapours when heated to decomposition.

#### **SECTION 11. TOXICOLOGICAL INFORMATION**

#### Information on likely routes of exposure

Eye contact Ingestion Inhalation Skin contact

### **Acute toxicity**

#### **Product:**

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

# Components:

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg,

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg,

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, high-viscosity;

Baseoil — unspecified:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg,

Acute inhalation toxicity : LC50 (Rat): > 5.2 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg,

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Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil —

unspecified:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg,

LC50 (Rat): > 5.2 mg/l Acute inhalation toxicity

Exposure time: 4 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg,

Skin corrosion/irritation

**Product:** 

Remarks : No data available

Serious eye damage/eye irritation

**Product:** 

No data available Remarks

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

# **SECTION 12. ECOLOGICAL INFORMATION**

### **Ecotoxicity**

**Product:** 

: Remarks: No data available Toxicity to fish

aquatic invertebrates

Toxicity to daphnia and other : Remarks: No data available

Toxicity to algae/aquatic

plants

: Remarks: No data available

: Remarks: No data available Toxicity to microorganisms

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# Persistence and degradability

**Product:** 

Biodegradability : Remarks: No data available

### **Bioaccumulative potential**

No data available

### Mobility in soil

No data available

#### Other adverse effects

No data available

# **SECTION 13. DISPOSAL CONSIDERATIONS**

### **Disposal methods**

Waste from residues : The product should not be allowed to enter drains, water

courses or the soil.

Offer surplus and non-recyclable solutions to a licensed

disposal company.

Waste must be classified and labelled prior to recycling or

disposal.

Send to a licensed waste management company.

Dispose of product residue in accordance with the instructions

of the person responsible for waste disposal.

#### **SECTION 14. TRANSPORT INFORMATION**

# **International Regulations**

IATA-DGR

Not regulated as a dangerous good

**IMDG-Code** 

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

**National Regulations** 

**49 CFR** 

Not regulated as a dangerous good

# **SECTION 15. REGULATORY INFORMATION**

California Prop. 65 This product contains chemical(s) known to the State of

California to cause cancer. For more information go to www.P65Warnings.ca.gov. The chemicals include:

ethyl acrylate 140-88-5

The components of this product are reported in the following inventories:

DSL : On the inventory, or in compliance with the inventory

TSCA : All chemical substances in this product are either listed on the

Internet: lubricants.petro-canada.com/sds Trademarks are owned or used under license. Page: 8 / 10 Petro-Canada Lubricants is a HF Sinclair brand

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TSCA Inventory or are in compliance with a TSCA Inventory

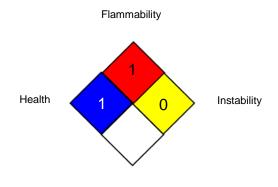
exemption.

IECSC : On the inventory, or in compliance with the inventory

#### **SECTION 16. OTHER INFORMATION**

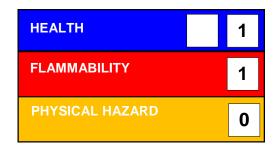
#### **Further information**

#### NFPA 704:



Special hazard

#### HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL : USA. NIOSH Recommended Exposure Limits

OSHA PO : USA. Table Z-1-A Limits for Air Contaminants (1989 vacated

values)

OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1

Limits for Air Contaminants

ACGIH / TWA : 8-hour, time-weighted average

NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour

workday during a 40-hour workweek

NIOSH REL / ST : STEL - 15-minute TWA exposure that should not be exceeded

at any time during a workday

OSHA P0 / TWA : 8-hour time weighted average OSHA Z-1 / TWA : 8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous

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Materials Identification System; IARC - International Agency for Research on Cancer; IATA -International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature: SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

For Copy of SDS : Internet: lubricants.petro-canada.com/sds

United States, telephone: 1-800-268-5850; fax: 1-800-201-

6285

For Product Safety Information: 1 905-491-0565

Prepared by : Product Safety: +1 905-491-0565

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The information is considered as correct, but not exhaustive, and will be used only as a guide, which is based in the current knowledge of the substance or mixture, and is applicable to proper safety precautions for the product.

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

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