

Valvoline™ MP 2-CYCLE TC-W3 MOTOR
OIL
VV461

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone	1-800-ASHLAND (1-800-274-5263)

Product name Valvoline™ MP 2-CYCLE TC-W3 MOTOR OIL

Product code VV461
Product Use Description No data

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid,

CAUTION! COMBUSTIBLE LIQUID AND VAPOR. MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN, CAUSE IRRITATION AND BURNS.

Potential Health Effects

Exposure routes

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye contact

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin contact

Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, skin burns, and other skin damage.

Ingestion

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Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: lung (for example, asthma-like conditions), skin

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects

Target Organs

Exposure to this material (or a component) has been found to cause kidney damage in male rats. The mechanism by which this toxicity occurs is specific to the male rat and the kidney effects are not expected to occur in humans.

Carcinogenicity

This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

Reproductive hazard

There are no data available for assessing risk to the fetus from maternal exposure to this material.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS-No.	Concentration
DISTILLATES, SOLVENT-REFINED HEAVY	64741-88-4	>=30-<40%

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PARAFFINIC		
DISTILLATES, SWEETENED MIDDLE	64741-86-2	>=15-<20%
ALIPHATIC PETROLEUM DISTILLATES	8052-41-3	>=5-<10%

4. FIRST AID MEASURES

Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.

Treatment: No information available.

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Version: 2.5

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Dry chemical, Carbon dioxide (CO₂), Water spray

Hazardous combustion products

carbon dioxide and carbon monoxide, Hydrocarbons, Sulphur oxides, Aldehydes, various hydrocarbons

Precautions for fire-fighting

If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes.

NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIA

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Ensure adequate ventilation. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Pay attention to the spreading of gases especially at ground level (heavier than air) and to the direction of the wind.

Environmental precautions

Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

Methods for cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

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Comply with all applicable federal, state, and local regulations. Suppress (knock down) gases/vapours/mists with a water spray jet.

7. HANDLING AND STORAGE**Handling**

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77.

Storage

Store in a cool, dry, ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure Guidelines**DISTILLATES, SOLVENT-REFINED HEAVY
PARAFFINIC 64741-88-4

OSHA Z1	Permissible exposure limit	500 ppm	
OSHA Z1	Permissible exposure limit	2,000 mg/m3	
OSHA Z1A	time weighted average	400 ppm	
OSHA Z1A	time weighted average	1,600 mg/m3	
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	400 ppm	
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	1,600 mg/m3	
ACGIH	time weighted average	5 mg/m3	Mist.
ACGIH	Short term exposure limit	10 mg/m3	Mist.
ACGIH NIC	time weighted average	0.2 mg/m3	Inhalable fraction.

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ALIPHATIC PETROLEUM DISTILLATES		8052-41-3
ACGIH	time weighted average	100 ppm
NIOSH	Recommended exposure limit (REL):	350 mg/m3
NIOSH	Ceiling Limit Value and Time Period (if specified):	1,800 mg/m3
OSHA Z1	Permissible exposure limit	500 ppm
OSHA Z1	Permissible exposure limit	2,900 mg/m3
OSHA Z1A	time weighted average	100 ppm
OSHA Z1A	time weighted average	525 mg/m3
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	100 ppm
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	525 mg/m3

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Eye protection

Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

Skin and body protection

Wear resistant gloves such as:

Neoprene

Nitrile rubber

Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

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Wear resistant gloves (consult your safety equipment supplier).
Discard gloves that show tears, pinholes, or signs of wear.

Respiratory protection

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Form	no data available
Colour	no data available
Odour	hydrocarbon-like
Boiling point/boiling range	(>)356 °F / 180 °C @ 760.00 mmHg
Melting point/range	(<)-38 °F / -39 °C
Sublimation point	no data available
pH	no data available
Flash point	(>)66.00 °C Cleveland open cup
Ignition temperature	no data available
Evaporation rate	0.1 butyl acetate=1
Lower explosion limit/Upper explosion limit	1.0 %(V) / 6.0 %(V)
Particle size	no data available
Vapour pressure	0.200 mmHg @ 68 °F / 20 °C
Relative vapour density	no data available
Density	(Average) 0.8550 g/cm3 @ 68 °F / 20 °C
Bulk density	No data
Water solubility	insoluble
Solubility	no data available
Partition coefficient: n-octanol/water	no data available
log Pow	no data available
Autoignition temperature	no data available
Viscosity, dynamic	no data available
Viscosity, kinematic	6.9 mm2/s
Solids in Solution	no data available

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Decomposition temperature	no data available
Burning number	no data available
Dust explosion constant	no data available
Minimum ignition energy	no data available

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Heat, flames and sparks.

Incompatible products

Strong oxidizing agents

Hazardous decomposition products

carbon dioxide and carbon monoxide, Sulphur oxides, Hydrocarbons, Aldehydes, various hydrocarbons

Hazardous reactions

Product will not undergo hazardous polymerization.

Thermal decomposition

No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

DISTILLATES, SOLVENT-REFINED HEAVY
PARAFFINIC : LD 50 Rat: > 5,000 mg/kg

DISTILLATES, SWEETENED MIDDLE : LD 50 Rat: > 5,000 mg/kg

ALIPHATIC PETROLEUM DISTILLATES : LD 50 Rat: > 5 g/kg

Acute inhalation toxicity

DISTILLATES, SOLVENT-REFINED HEAVY
PARAFFINIC : LD 50 Rat: > 3.9 mg/L; 4 h

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DISTILLATES, SWEETENED MIDDLE : no data available

ALIPHATIC PETROLEUM DISTILLATES : no data available

Acute dermal toxicity

DISTILLATES, SOLVENT-REFINED HEAVY
PARAFFINIC : LD 50 Rabbit: > 2,000 mg/kg

DISTILLATES, SWEETENED MIDDLE : no data available

ALIPHATIC PETROLEUM DISTILLATES : LD 50 Rabbit: (>) 3 g/kg

12. ECOLOGICAL INFORMATION

Biodegradability

DISTILLATES, SOLVENT-REFINED HEAVY
PARAFFINIC : no data available

DISTILLATES, SWEETENED MIDDLE : no data available

ALIPHATIC PETROLEUM DISTILLATES : no data available

Bioaccumulation

DISTILLATES, SOLVENT-REFINED HEAVY
PARAFFINIC : no data available

DISTILLATES, SWEETENED MIDDLE : no data available

ALIPHATIC PETROLEUM DISTILLATES : no data available

Ecotoxicity effects

Toxicity to fish

DISTILLATES, SOLVENT-REFINED HEAVY
PARAFFINIC : no data available

DISTILLATES, SWEETENED MIDDLE : no data available

ALIPHATIC PETROLEUM DISTILLATES : no data available

Toxicity to daphnia and other aquatic invertebrates.

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DISTILLATES, SOLVENT-REFINED HEAVY
PARAFFINIC : no data available
DISTILLATES, SWEETENED MIDDLE : no data available
ALIPHATIC PETROLEUM DISTILLATES : no data available

Toxicity to algae

DISTILLATES, SOLVENT-REFINED HEAVY
PARAFFINIC : no data available
DISTILLATES, SWEETENED MIDDLE : no data available
ALIPHATIC PETROLEUM DISTILLATES : no data available

Toxicity to bacteria

DISTILLATES, SOLVENT-REFINED HEAVY
PARAFFINIC : no data available
DISTILLATES, SWEETENED MIDDLE : no data available
ALIPHATIC PETROLEUM DISTILLATES : no data available

Biochemical Oxygen Demand (BOD)

DISTILLATES, SOLVENT-REFINED HEAVY
PARAFFINIC : no data available
DISTILLATES, SWEETENED MIDDLE : no data available
ALIPHATIC PETROLEUM DISTILLATES : no data available

Chemical Oxygen Demand (COD)

DISTILLATES, SOLVENT-REFINED HEAVY
PARAFFINIC : no data available
DISTILLATES, SWEETENED MIDDLE : no data available
ALIPHATIC PETROLEUM DISTILLATES : no data available

Additional ecological information

DISTILLATES, SOLVENT-REFINED HEAVY
PARAFFINIC : no data available

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DISTILLATES, SWEETENED MIDDLE : no data available

ALIPHATIC PETROLEUM DISTILLATES : no data available

13. DISPOSAL CONSIDERATIONS**Waste disposal methods**

Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION**REGULATION**

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
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U.S. DOT - ROAD

Not dangerous goods

U.S. DOT - RAIL

Not dangerous goods

U.S. DOT - INLAND WATERWAYS

Not dangerous goods

TRANSPORT CANADA - ROAD

Not dangerous goods

TRANSPORT CANADA - RAIL

Not dangerous goods

TRANSPORT CANADA - INLAND WATERWAYS

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

Not dangerous goods

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Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

Not dangerous goods

***ORM = ORM-D, CBL = COMBUSTIBLE LIQUID**

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION**California Prop. 65**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SARA Hazard Classification

Fire Hazard

Acute Health Hazard

New Jersey RTK Label Information

DISTILLATES, SOLVENT-REFINED HEAVY PARAFFINIC	64741-88-4
DISTILLATES, SWEETENED MIDDLE	64741-86-2
LUBRICANT ADDITIVE	
RESIDUAL OILS (PETROLEUM), SOLVENT-REFINED	64742-01-4
ALIPHATIC PETROLEUM DISTILLATES	8052-41-3

Pennsylvania RTK Label Information

DISTILLATES, SOLVENT-REFINED HEAVY PARAFFINIC	64741-88-4
DISTILLATES, SWEETENED MIDDLE	64741-86-2
LUBRICANT ADDITIVE	
RESIDUAL OILS (PETROLEUM), SOLVENT-REFINED	64742-01-4

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ALIPHATIC PETROLEUM DISTILLATES

8052-41-3

Notification status

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133)	y (positive listing)
China. Inventory of Existing Chemical Substances	y (positive listing)
Australia. Industrial Chemical (Notification and Assessment) Act	y (positive listing)
US. Toxic Substances Control Act	y (positive listing)
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	y (positive listing)
Japan. Kashin-Hou Law List	y (positive listing)
Korea. Toxic Chemical Control Law (TCCL) List	y (positive listing)

	HMIS	NFPA
Health	1	1
Flammability	2	2
Physical hazards	--	
Instability		0
Specific Hazard	--	--

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).