

Revision Date: 11/12/2009

Print Date: 3/18/2010 MSDS Number: R0172415

Version: 2.4

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. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION.

Potential Health Effects

Exposure routes

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

Eye contact

May cause mild eye irritation. Symptoms include stinging, tearing, and redness.

Skin contact

May cause mild skin irritation. Symptoms may include redness and burning of skin. 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

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



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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

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



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Components	CAS-No.	Concentration
REFINED HEAVY PARAFFINIC		
DISTILLATES, SWEETENED	64741-86-2	>=15-<20%
MIDDLE		
ALIPHATIC PETROLEUM	8052-41-3	>=5-<10%
DISTILLATES		

4. FIRST AID MEASURES

Eyes

If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

Skin

Remove contaminated clothing. Wash exposed area with soap and water. If 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. This material is an aspiration hazard. Potential danger



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from aspiration must be weighed against possible oral toxicity (See Section 2 - Swallowing) when deciding whether to induce vomiting.

Treatment: No information available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Dry chemical, Carbon dioxide (CO2)

Hazardous combustion products

carbon dioxide and carbon monoxide, sulfur oxides, Hydrocarbons, 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 liquid with water used for cooling purposes.

Flammability Class for Flammable Liquids

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



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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).

Other information

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 64741-88-4 HEAVY PARAFFINIC

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)	400 ppm	
	Permissible Exposure Limit (PEL):		
US CA OEL	Time Weighted Average (TWA)	1,600 mg/m3	



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Permissible Exposure Limit (PEL):

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.

ALIPHATIC PETROLEUM 8052-41-3 DISTILLATES

ACGIH	time weighted average	100 ppm
NIOSH	Recommended exposure limit	350 mg/m3
	(REL):	-
NIOSH	Ceiling Limit Value and Time	1,800 mg/m3
	Period (if specified):	-
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)	100 ppm
	Permissible Exposure Limit (PEL):	
US CA OEL	Time Weighted Average (TWA)	525 mg/m3
	Permissible Exposure Limit (PEL):	-

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

Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

Skin and body protection

Wear resistant gloves such as: Neoprene Nitrile rubber



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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.

Respiratory protection

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be persmissible under certain circumstancs 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 stateliquidFormNo dataColourNo data

Odour hydrocarbon-like

Boiling point/boiling range 180.00 °C / 356 °F@ 760.00 mmHg

Melting point/range -38 °F / -39 °C

pH No data

Flash point (>)151 °F / 66 °C, Cleveland open cup

Evaporation rate0.1 (butyl acetate=1) **Explosion limits**1.0 %(V) 6.0 %(V)

Vapour pressure 0.20 mmHg @ 68 °F / 20 °C

Vapour density No data

Density (Average) 0.8550 g/cm3 @ 68 °F / 20 °C

Solubility insoluble in water

Partition coefficient: n-No data

octanol/water

log Pow no data available

Autoignition temperature No data

10. STABILITY AND REACTIVITY



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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, various hydrocarbons

Hazardous reactions

Product will not undergo hazardous polymerization.

Thermal decomposition

No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

<u> </u>	
DISTILLATES, SOLVENT-REFINED HEAVY	LD 50 Rat: > 5,000 mg/kg
PARAFFINIC	
DISTILLATES, SWEETENED MIDDLE	LD 50 Rat: > 5,000 mg/kg
ALIPHATIC PETROLEUM DISTILLATES	LD 50 Rat: > 5 g/kg

Acute inhalation toxicity

I	DISTILLATES, SOLVENT-REFINED HEAVY	LD 50 Rat: > 3.9 mg/l , 4 h
	PARAFFINIC	
	DISTILLATES, SWEETENED MIDDLE	no data available
Ī	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



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12. ECOLOGICAL INFORMATION

Aquatic toxicity

Acute and Prolonged Toxicity to Fish No data Acute Toxicity to Aquatic Invertebrates No data

Environmental fate and pathways

No data

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

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 the State of California to cause cancer, birth, or any other reproductive defects.

SARA Hazard Classification Fire Hazard

Acute Health Hazard



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

Pennsylvania RTK Label Information

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

Reportable quantity - Components

DISTILLATES, SOLVENT-REFINED	64741-88-4	none
HEAVY PARAFFINIC		
DISTILLATES, SWEETENED	64741-86-2	none
MIDDLE		
ALIPHATIC PETROLEUM	8052-41-3	none
DISTILLATES		

	Health	Flammability	Reactivity	Other
HMIS	1	2	0	
NFPA	1	2	0	

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).