



Two Stroke Motor Oils

Ester Tech MX 9

Description

Ester Tech MX9 is the ultimate Grand Prix Off Road 2-stroke oil. Ester Tech MX9 is a full synthetic blue coloured 2-stroke oil with Putoline's revolutionary ESTER TECH additive system, which ensures exceptional film strength, even under the most extreme racing conditions.

Application

Specifications

JASO FD
ISO-L-EGD
API TC+

Typical standard analyses

Colour	BLAUW
Density at 15 °C, kg/l	0,871
Viscosity 40 °C, mm ² /s	44,00
Viscosity 100 °C, mm ² /s	8,30
Viscosity Index	167
Flash Point PM, °C	78
Pour Point, °C	-36
Total Base Number, mgKOH/g	6,6
Sulphate Ash, %	0,26

09/19/2012

The data mentioned in this product information sheet is meant to enable the reader to orientate himself about the properties and possible applications of our products. Although this overview is composed with all possible care on the stated date, the compiler does not accept any liability for damages caused by incompleteness and/or inaccuracies in this information, especially when these are caused by obvious typing errors. The terms of delivery of the supplier apply to all product supplies. The reader is advised, especially for critical applications, to make the final product choice in consultation with the supplier. Due to continual product research and development, the information contained herein is subject to changes without notification.

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 10.09.2012

Version number 1

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1 Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** Ester Tech MX9
- **Article number:** PT.30.10
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use**
 - SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
 - SU21 Consumer uses: Private households / general public / consumers
 - SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- **Product category** PC24 Lubricants, greases, release products
- **Process category**
 - PROC1 Use in closed process, no likelihood of exposure
 - PROC2 Use in closed, continuous process with occasional controlled exposure
 - PROC8a Transfer of substance or preparation (charging/discharging) from/to vessels/ large containers at non-dedicated facilities
 - PROC8b Transfer of substance or preparation (charging/discharging) from/to vessels/ large containers at dedicated facilities
 - PROC9 Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
 - PROC20 Heat and pressure transfer fluids in dispersive, professional use but closed systems
- **Environmental release category**
 - ERC4 Industrial use of processing aids in processes and products, not becoming part of articles
 - ERC7 Industrial use of substances in closed systems
 - ERC9a Wide dispersive indoor use of substances in closed systems
 - ERC9b Wide dispersive outdoor use of substances in closed systems
- **Application of the substance / the preparation** Motor olie
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:** Putoline Oil
Dollegoorweg 15
NL-7602 EC ALMELO
Tel.: +31 (0)546 818165
- **Further information obtainable from:** Product safety department - vib@putoline.com
- **1.4 Emergency telephone number:** +31 (0)546 818165 (9 AM to 4 PM, Monday to Friday)

2 Hazards identification

- **2.1 Classification of the substance or mixture**
 - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Not applicable.
 - **Information concerning particular hazards for human and environment:** The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
 - **Classification system:** The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
-
- **2.2 Label elements**
 - **Labelling according to EU guidelines:** Observe the general safety regulations when handling chemicals.
The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).
 - **Special labelling of certain preparations:** Contains calcium branched chain alkyl phenate sulphide. May produce an allergic reaction.
Safety data sheet available for professional user on request.

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- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

· 3.2 Mixtures

· Dangerous components:		
CAS: 64742-47-8 EC number: 926-141-6 Reg.nr.: 01-2119456620-43	Distillates (petroleum), hydrotreated light ☒ Xn R65 R66 ----- ☠ Asp. Tox. 1, H304	10-25%
Polymer	polyolefin polyamine succinimide R53 ----- Aquatic Chronic 4, H413	2.5-10%
Polymer	calcium branched chain alkyl phenate sulphide ☒ Xi R43 R52/53 ----- ☠ Skin Sens. 1, H317; Aquatic Chronic 3, H412	1-2.5%

- **Additional information:** The highly refined mineral oil contains <3% (w/w) DMSO extract, according to IP346. For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **4.1 Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** If swallowed or in case of vomiting, danger of entering the lungs.

5 Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** CO₂, dry chemical, or foam. Water can be used to cool and protect exposed material.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
Wear fully protective suit.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Remove from the water surface (e.g. skim or suck off).
- **6.4 Reference to other sections** No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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7 Handling and storage

- **7.1 Precautions for safe handling**
No special measures required.
Avoid the formation of oil haze.
- **Information about fire - and explosion protection:**
Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store only in the original receptacle.
- **Information about storage in one common storage facility:**
Not required.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
- **7.3 Specific end use(s)**
No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:**
No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
Contains mineral oil. Under conditions which may generate mists, observe the OSHA PEL of 5 mg per cubic meter, ACGIH STEL of 10 mg per cubic meter.
- **Additional information:**
The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Wash hands before breaks and at the end of work.
- **Respiratory protection:**
Not required.
- **Protection of hands:**
Oil resistant gloves
- **Material of gloves**
Nitrile rubber, NBR
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
PVC gloves
Neoprene gloves
- **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**
Goggles recommended during refilling
- **Body protection:**
Protective work clothing

9 Physical and chemical properties

<ul style="list-style-type: none"> · 9.1 Information on basic physical and chemical properties · General Information · Appearance: <li style="padding-left: 20px;">Form: Liquid <li style="padding-left: 20px;">Colour: Blue · Odour: Characteristic 	
<ul style="list-style-type: none"> · Change in condition <li style="padding-left: 20px;">Boiling point/Boiling range: Undetermined. · Drip point: <li style="padding-left: 20px;">Pour point: -36 °C (ASTM D97) 	
<ul style="list-style-type: none"> · Flash point: 78°C · Flammability (solid, gaseous): Not applicable. · Self-igniting: Product is not selfigniting. 	

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· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Density at 20°C:	0.871 g/cm ³
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
40°C	44 mm ² /s (ASTM D445)
· Solvent content:	
Organic solvents:	0.0 %
· 9.2 Other information	No further relevant information available.

10 Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** To avoid thermal decomposition do not overheat.
- **10.3 Possibility of hazardous reactions** Reacts with strong oxidizing agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values relevant for classification:	
64742-47-8 Distillates (petroleum), hydrotreated light	
Oral	LD50 >5000 mg/kg (rat)
Dermal	LD50 >2000 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:** The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version. When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** Product contains mineral oils of types shown to be noncarcinogenic in animal skin-painting studies. Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC). Other components are not known to be associated with carcinogenic effects.

12 Ecological information

- **12.1 Toxicity**

· Aquatic toxicity:	
64742-47-8 Distillates (petroleum), hydrotreated light	
LC50 (96 h)	>45 mg/l (fish)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.

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- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

13 Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue
13 02 05* mineral-based non-chlorinated engine, gear and lubricating oils

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· 14.1 UN-Number	Void
· ADR, ADN, IMDG, IATA	Void
· 14.2 UN proper shipping name	Void
· ADR, ADN, IMDG, IATA	Void
· 14.3 Transport hazard class(es)	Void
· ADR, ADN, IMDG, IATA	Void
· Class	Void
· 14.4 Packing group	Void
· ADR, IMDG, IATA	Void
· 14.5 Environmental hazards:	No
· Marine pollutant:	No
· 14.6 Special precautions for user	Not applicable.
· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.

15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations:**
- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
 - H304 May be fatal if swallowed and enters airways.
 - H317 May cause an allergic skin reaction.
 - H412 Harmful to aquatic life with long lasting effects.
 - H413 May cause long lasting harmful effects to aquatic life.
 - R43 May cause sensitisation by skin contact.
 - R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 - R53 May cause long-term adverse effects in the aquatic environment.
 - R65 Harmful: may cause lung damage if swallowed.
 - R66 Repeated exposure may cause skin dryness or cracking.

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- **Department issuing MSDS:** Product safety department.
- **Contact:** Product safety department
- **Sources** 67/548/EEC - Dangerous Substances Directive
99/45/EEC - Dangerous Preparations Directive