Polytron MTC Specifications

Product Description:

POLYTRON Metal Treatment Concentrate (MTC) is a uniquely blended petroleum based formula that is used as a complementary additive package in all motor oils, gear oils and other lubricants.

POLYTRON MTC is a complementary additive package that through micro-metallurgical process forms (from the Original metal) a durable polished-like micro - layer of metal that dramatically resists wear, extreme pressure and excessive temperature. Metal surfaces remain treated at all times which provides for immediate start-up lubrication. Friction is reduce by up to 90% and wear by up to 95%, which results in estimated extension of equipment service life of up to 900% and oil service life of up to 600%, plus major Improvement in performance and fuel economy.

POLYTRON MTC as a complementary additive package to motor oils has unique lubricating qualities that provide easy start-up at low temperature, better fuel economy, lower oil consumption and wear elimination under all driving conditions. POLYTRON MTC contributes to noise level reduction and lower operating temperature.

POLYTRON MTC is an excellent dispersant which holds sludge harmlessly in suspension while preventing the deposition of varnish and lacquer on engine parts in severe service. Oil filter life is improved and the PCV (Positive Crankcase Ventilation) valve remains free and clean. This quality also contributes to longer engine life and fuel economy. 10% of POLYTRON MTC will ensure complete clean-up of the engine from sludge and varnish thus ensuring very clean and smooth engine operation and cleaner exhaust gases.

POLYTRON MTC as a complementary package to transmission fluids, hydraulic oils, compressor oils etc. contributes to up to 95% reduction in wear, reduction in noise level and operating temperature. POLYTRON MTC is an excellent dispersant and moisture repellent. Its performance is not affected by moisture dirt and abrasive dust.

Typical Uses:

- Recommended for motor oils in passenger cars, light duty pickups, motorcycles and other gasoline engines. Motor oils in Diesel Engines of Heavy Duty Trucks and other heavy duty equipment.
  Engines of: Cummins, Caterpillar, Fiat-Allis, Ford, GMC, Isuzu, John Deer, Mack, M.A.N., Mercedes-Benz, Mitsubishi, Scania, Volvo, and others.
- Transmission Fluids.
- Hydraulic Oils.
- Compressor oils.
- Refrigeration oils.
- Arbor and form oils.
- Ways oils.
- CP oils.
- Gear oils.
- Cutting oils.

Typical Inspections

	ASTM Test	
Specific Gravity, 60/60	D-287	0.981
Flash Point, °F / °C	D-92	324 / 162
Viscosity:		
cSt @ 40° C	D-445	101
cSt @ 100° C	D-2270	10.2
Viscosity Index	D-1500	137
Color	D-874	3.0
Ash (Wt.	D-2896	0.5
%) TBN		6.0

Material Safety Data Sheet. (MSDS)

Trade name: Polytron Metal treatment Concentrate

Printing Date: January 30, 2018

Identification of substance

Product details

Product Description: Polytron MTC (Metal Treatment Concentrate)

Application of the substance: Complementary Oil Additive package

Manufacturer / Supplier:
Eptech Corporation, USA

Emergency information:
e-mail: agranimicrolubes@gmail.com , tech@polytronofficial.com

Composition / Data on components

Chemical characterization

Description: Oily fluid mixture of petroleum based chemicals mixed with oxidation inhibitor and detergent chemicals.

Dangerous components:

CAS-No.	Designation	%	Index R-phrases
9003-29-6 EINECS: 500-004-7	Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)	2.4	
8042-47-5 EINECS: 232-455-8	White mineral oil (petroleum)	53.4	
61788-90-7 EINECS: 263-016-9	Amines, coco alkyldimethyl, N-oxides	41.5	
617-89-86-4 EINECS: 263-093-9	Oxidation Inhibitor & Detergent	2.7	

Hazards identification

Hazard designation: Xi Irritant
Information pertaining to particular dangers for man and environment:
R22 Harmful if swallowed
R36 Irritating to eyes
R38 Irritating to skin
Classification system:
The classification is in line with current EC lists.
Refer to no. 11 and 12

First aid measures

After Inhalation:
Remove exposed person to fresh air. If breathing is labored, administer oxygen and obtain immediate medical attention. If irritation persists , get medical attention.
After skin contact:
Wash immediately with soap and water. Remove soiled clothing. Get medical attention if irritation develops. Launder contaminated clothing.

After Ingestion:
DO NOT INDUCE VOMITING. Rinse out mouth and then drink plenty of water. Seek immediate medical attention.

Fire fighting measures

Flash Point: 162^{0}C
Slightly Combustible. May release flammable vapors when heated above flash point.
Extinguishing Media:
Carbon Dioxide, dry chemical, or foam. Avoid using water.

Protective equipment:
Refer to sections 8 and 16
General Advice:
Use water only for cooling container. Water may cause splattering, or transport the flame.

Accidental release measures

Personnel-related safety precautions:
Evacuate all non-essential personnel. Personal Protective Equipment must be worn, see PPE section 8 & 16.
Remove sources of ignition.
Measures for environmental protection:
Prevent entry into sewers and waterways.
Measures for cleaning/collecting:
Contain release, pick up free liquid for recycling or disposal. Residual liquid can be absorbed with inert material.
Additional information:
No dangerous materials are released

Handling and storage

Handling:
Avoid prolonged skin contact, breathing vapors, and contaminated clothing. Use with adequate ventilation. Wear recommended protective equipment. Practice good personal hygiene after handling. Empty containers retain material residue. Do not cut, weld, braze, solder or expose containers to other ignition sources.
Storage:
Store in closed containers of proper construction. Store away from ignition sources and in areas of good ventilation.

Exposure controls and personal protection

Components with critical values that require monitoring at the workplace:

CAS-No.	Designation of material	Value	Unit
8042-47-5		TLV (US) 5	mg/m³
EINECS: 232-455-8			

Additional information:
Use in areas of adequate ventilation. Use mechanical exhaust to control vapors or mists (if poresent).
Personal protective equipment:
General protective and hygienic measures:
The usual precautionary measures should be adhered to in handling the chemicals.
Respiratory Protection:
Use approved respirator with organic vapor/mist cartridge is recommended if exposure limit is exceeded. Self-contained breathing apparatus is recommended for confined space entry.
Gloves:
Nitrile or neoprene gloves are recommended.
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:
Wear safety glasses, goggles or face shield when working above eye level if there is danger of splashing.
Clothing:
Long sleeve shirt and apron when potential for skin contact. Wear neoprene or nitrile rubber boots when necessary to avoid contaminating shoes.

Physical and chemical properties:

Form: Liquid
Colour: Yellowish clear
Smell: Odorless
Specific Gravity: 0.956

Boiling point/ Boiling range:	> 300 ^{0}C
Flash point (open cup):	> 185 ^{0}C (365 ^{0}F)
Self-in flammability:	Not determined
Vapor density (T=20ºC)	Heavier than air
Vapor pressure (T=20ºC)	1 mmHg
Water solubility (T=20ºC)	Low
Evaporation Point:	Higher than ether

Stability and reactivity

Stability:
Material is normally stable at ambient temperature and pressure.
Conditions to be avoided:
Do not store with strong oxidizing agents. Keep away from heat, sparks, open flame, or all sources of ignition.
Dangerous reactions:
Will not occur.
Dangerous products of decomposition:
Carbon dioxide, carbon monoxide, hydrocarbons.

Toxicological information

Primary irritant effect:
On the skin:
Not expected to be a primary skin irritant. Prolonged or repetitive contact may cause irritation.
On the eye:
Not expected to cause eye irritation. Prolonged or repetitive contact may cause irritation.
Sensitization:
No sensitizing effect known.
Oral Toxicity:
Swallowing material may cause irritation of the gastrointestinal lining, nausea, vomiting, diarrhea.
Carcinogenicity:
None.

Ecological information

General notes:
Due to very low solubility of this product in water it is impossible to asses the effect of this product on marine and plant life, although large spills in water or soil are expected to have adverse effects on marine and plant life.

Disposal considerations

Recommendation:
Recycle used oil. Do not contaminate used oil with solvents or other chemicals.
Unclean packaging:
Disposal must be made according to official regulations.

Transport information

The product is not classified as dangerous for transport by road, by sea or by air in accordance with appropriate regulations (RID/ADR, IMDG, IATA-DGR).

Regulatory information

Designation according to EC-guidelines:
This substance is not listed in the Annex I of Regulation (EC) No 689/2008.
EU REACH: Anex XVII
Not applicable
Hazard-determining components for labeling:
ELINCS: None

R-phrases:
None

S-phrases:

S 24	When handling, avoid contact with skin and eyes
S 25	In case of massive contact with eyes rinse immediately with plenty of water and seek medical advice.
S 37/39	When risk of splash, wear suitable gloves and wear safety glasses.