SECTION 1: Chemical product identification and information about manufacturer

1.1 Product identification

Motor oil M-14D$_2$

Synonyms – absent.

1.2 Recommendations and restrictions on the use of chemical products

Engine oil for tractor diesel internal combustion engines

1.3 Information about supplier of Safety Data Sheet for the mixture

Company: LLC "JV YUKOIL"
Bazova St, 3a
Locality: Zaporozhye, Ukraine
Phone number: +38 061 222 80 32
Telefax: +38 061 222 80 32
The contact person: FEA Department
E-mail: support@yukoil.com
Internet: https://yuko.ua
Reference Department: FEA Department

1.4 Emergency telephone

Emergency phone number: +38 061 270 50 81

SECTION 2: Hazard Identification

2.1 Classification of substances and mixtures

This substance is not classified as hazardous according to Directive (EU) No 1272/2008 as amended.

2.2 Label elements

(EC) No 1272/2008, 67/548/EEC або 1999/45/EC

The product is not subject to mandatory labelling with EU directives.

2.3 Other risk factors

Allergic reactions may occur.
Product vapors may irritate the respiratory tract, skin and eyes.
Harmful to health if swallowed. Do not allow product that has leaked to soak into the ground.
Avoid uncontrolled release of product into the environment.

SECTION 3: Composition, information on ingredients

3.2 Mixtures

(EU) No 1272/2008

Composition of hazardous substances

№ European Commission	CAS-number	Percentage (by weight)	Name	Classification
278-012-2	74869-22-0	<95%	Mineral (base) oil	In clause 8.1
298-577-9	93819-94-4	0,6% to 1,4%	Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)	Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 2; H411
274-263-7	70024-69-0	0,8% to 1,5%	Benzenesulfonic acid, mono-C16-24-alkyl derivs., Calcium salts	Eye Irrit. 2; H319

67/548/EEC or 1999/45/EC

Unsafe composition of substances

№ European commission	CAS-number	Percentage (by weight)	Name	Classification 67/548/EEC
278-012-2	74869-22-0	<95%	Mineral (base) oil	In clause 8.1
298-577-9	93819-94-4	0,6% to 1,4%	Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)	Xi; R41, R38 N; R51/53

274-263-7	70024-69-0	0,8% to 1,5%	Benzenesulfonic acid, mono-C16-24-alkyl derivs., Calcium salts	R53

Contains ingredients that are not subject to declaration according to current safety and regulatory criteria. For the explanatory text of R-phrases, see section 16.

Further instructions
DMSO – Extract <3%, IP 346.
PCB concentration <1 mg/kg.
Classification system: the classification is in accordance with the current EU lists, however, supplemented by data from special literature and company data.

SECTION 4: First aid measures

4.1 Description of first aid measures

When inhaling
In case of loss of consciousness, place the victim in a comfortable position and seek medical care. If symptoms persist, consult a doctor.

If on skin
Wash affected area with plenty of water and neutral soap. Seek medical care if skin irritation occurs. Contaminated clothing should be washed before reuse.

In contact with eyes
In case of contact with eyes, rinse immediately with plenty of running water for at least 5 minutes. Then consult a doctor.

When ingested
Do not induce vomiting. Seek medical care immediately.

4.2 Most important symptoms and effects, both acute and delayed
See section 11

4.3 Indication of any immediate medical attention and special treatment needed
Information for the doctor: symptomatic treatment

SECTION 5: Measures and means of ensuring fire and explosion safety

5.1 Firefighting equipment
To extinguish fires use water spray, foam, powder, extinguishing agents or carbon dioxide (CO_2).

Firefighting equipment which must not be used for safety reasons
Powerful flow of water

5.2 Hazards associated with the substance or mixture
In case of fire, carbon monoxide, carbon dioxide (CO2), sulphur oxides, phosphorus oxides, nitrogen oxides may occur.

5.3 Firefighting instructions

Special protective equipment for firefighting
In case of fire, self-contained breathing apparatus is recommended.

Additional instructions
Standard procedures for the elimination of chemical fires
Use fire-fighting measures that comply with local laws and protocols for emergency localization and elimination.

SECTION 6: Measures for the prevention and elimination of emergency situations

6.1 Perosnal safety measures, protective equipment and emergency procedures
Use a set of personal protective equipment.
Avoid contact with skin, eyes and clothing.
Personal insecurity - slipping on a spilled product.
Localize sources of ignition.
When vapors, dust and aerosols are released, use respiratory equipment.

6.2 Environmental measures
Prevent entry into sewage and water bodies. If released into the atmosphere or if the product enters waterways, soil or

sewers, notify the local authorities. Prevent surface spread (e.g. localize or protect against spilage).

6.3 Methods and materials for localization and purification
Collect loose liquid for recycling and / or disposal. Residues of the product can be collected with an inert material (sand, diatomaceous earth, universal sorbing agents, sawdust, cloth). Deal with contaminated material in accordance with section 13.

6.4 References to other sections
See sections 7, 8 and 13 for more information.

SECTION 7: Rules of conduct and storage

7.1 Protective measures to ensure safety when working with the substance

Guidelines for safe behavior
Provide ventilation at the workplace (there must be exhaust ventilation in the room).
Avoid contact with skin, eyes and clothing, inhalation of product vapors.

Hygiene measures
Be sure to wash your hands before breaks and after work.
Use a protective skin cream.
If the product gets on your clothes, wash it off immediately and clean it thoroughly before reuse.

Instructions on fire and explosion protection
Take precautions against static electricity build-up (grounding during pumping / overflowing operations). Avoid the formation of oil mist.
Keep away from open sources of ignition, refrain from smoking when handling the product.

7.2 Conditions for safe storage, including any incompabilities

Requirements for warehouses and containers
Keep product packaging dry and sealed to prevent contamination, moisture and direct sunlight.

Storage conditions
Store separately from food, drink and animal feed. Do not store together with strong oxidants.

Further information about warehouse storage
Recommended storage temperature: 20 ± 10 ° C.
Protect from heat, UV radiation, direct sunlight.

SECTION 8: Measures for the influence control and personnel protection

8.1 Control parameters

The product does not contain significant quantities of substances with concentration limit values that need to be monitored at the workplace. During the manufacture, they are guided by applicable laws and regulations.

Other substances with TLV
Contains mineral oil. Oil mist may form.
Recommended value limits for oil mist:
TWA: 5 mg/m^3
STEL: 10 mg/m^3

8.2 Control of harmful influences
Provide adequate ventilation and local exhaust ventilation in critical areas.

Personal protective measures
After handling products before eating, smoking, using the toilet and at the end of work wash hands and face. Take off dirty clothes. Contaminated clothing should be washed before reuse. Do not eat, drink or smoke in the workplace.

Eye protection
Tightly sealed safety goggles. DIN - ZEN - standards: EN 166

Respiratory protection
Not required
If exhaust ventilation is not possible or insufficient, breathing apparatus should be worn.

Hand protection
Oil resistant protective gloves

Tested protective gloves must be worn: DIN - ZEN - standards: EN 374.
Suitable material: NBR (nitrile rubber). The time of loss of mechanical integrity and the swelling characteristics of the material must be taken into account. Preventive skin protection with a protective cream.

Body protection
Wear suitable protective clothing when working.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation	liquid (under normal conditions)
Colour	from light yellow to dark brown
Scent	specific, not annoying
Flash point	220 °C
Water solubility	insoluble
Kinematic viscosity at 100 ° C	14,5 sSt
Ignition temperature	more than 250 °C
Density at 20 ° C	0,890 g/cm^3
Pour point	minus 12 °C

The above data are typical and not a specification.

SECTION 10: Stability and chemical activity

10.1 Reactivity
Read carefully all the information provided in sections 10.2 - 10.6.

10.2 Stability
The material is generally stable at room temperature and pressure. See section 7 for details.

10.3 Possiblity of hazardous reactions
Absent

10.4 Conditions to avoid
See section 7, no further action is required. To avoid thermal decomposition - do not overheat.

10.5 Incompatible materials
Oxidants, compressed oxygen

10.6Hazardous decomposition materials
The product is stable under normal conditions of storage and use.

Thermal decomposition
Smoke, carbon monoxide (CO), carbon dioxide (CO_2), aldehydes and other products of incomplete combustion. Sulfur oxides, phosphorus oxides, hydrogen sulfide, alkyl mercaptans and sulfides can be released.

SECTION 11: Toxicological information

11.1 Information about toxicological effects

Acute toxicity

Oral
The half-lethal dose of LD_{50} for white rats is more than 5000 mg / kg. Results are based on data from components or similar products.

Dermal
Half-lethal dose LD_{50} for rabbits is more than 2000 mg / kg. Results are based on data from components or similar products.

Inhalation
There is no evidence that the product or its components may present a toxicological hazard by inhalation.

Skin damage/irritation
May cause mild skin irritation. Results are based on data from components or similar products. Prolonged or repeated skin contact with clothing soaked in the material may cause dermatitis. Symptoms may include redness, rash, swelling, dryness, and cracking of the skin.

Serious eye injury / damage
No eye irritation expected. Results are based on data from components or similar products.

Respiratory tract irritation
If the material smokes or emits vapors when heated, their exposure may cause some irritation of the mucous membranes and upper respiratory tract. Results are based on data from components or similar products.

Respiratory tract and skin sensitization
Skin
There is no evidence that the product or its components cause skin sensitization.

Breathing
There is no data to indicate that the product or its components may be respiratory sensitizers.

Germ cell mutagenesis
There are no data on mutagenesis or genotoxicity of the product or its components present in concentrations above 0.1%.

Carcinogenecity
This product is believed to contain highly refined petroleum products and is not a carcinogen according to IARC. All oils contained in this product contain less than 3% extracted substances in accordance with the IP 346 test.

Reproductive toxicity
There is no data that the product or its components affect reproductive function at concentrations of more than 0.1%.

Repeated Exposure to Specific Organ Toxicity (STOT)
There are no data on the hazards of chronic exposure to the product or its components present in concentrations exceeding 1%.

Other information
No other health threats known.

Mineral (base) oil CAS # 74869-22-0
Acute toxicity
Orally
The semi-lethal dose of LD50 for white rats is more than 5000 mg / kg. The results are based on data for components or similar products

Dermal
The semi-lethal dose of LD50 for rabbits is more than 2000 mg / kg. The results are based on data for components or similar products

Inhalation
There is no evidence that the product or its components may present a toxicological hazard if inhaled

Irritation
Skin
May cause mild skin irritation. The results are based on data for components or similar products. Prolonged or repeated contact of clothing impregnated with the material may cause dermatitis. Symptoms may include redness, rash, swelling, dryness, and cracking of the skin.

Eyes
No eye irritation is expected. The results are based on data for components or similar products

Respiratory tract
If the material smokes or emits vapors when heated, their effects may cause some irritation of the mucous membranes and upper respiratory tract. The results are based on data for components or similar products

Sensitization
Skin
There is no evidence that the product or its components cause skin sensitization

Respiratory tract
There is no evidence that the product or its components may be airway sensitizers.

Eyes
There is no evidence that the product or its components cause eye sensitization

Chronic toxicity
There are no data on the risk of chronic exposure to the product or its components present in concentrations above 1%

Carcinogenicity
It is believed that this product contains highly purified petroleum products and is not a carcinogen, according to IARC. All oils contained in this product contain less than 3% of extractable substances according to test IP 346

Mutagenicity
There are no data on the mutagenicity or genotoxicity of the product or its components

Reproductive toxicity
There is no evidence that the product or its components affect reproductive function

Other information
Other health threats are unknown

Zinc bis [O- (6-methylheptyl)] bis [O- (sec-butyl)] bis (dithiophosphate) CAS # 93819-94-4
Acute toxicity
Orally
Semi-lethal dose LD50 2600 mg / kg for male / female rats

Dermal
The semi-lethal dose of LD50 for rats is more than 2000 mg / kg

Inhalation
The semi-lethal concentration of LC50 is more than 2 mg / l when exposed to rats for 1 hour

Irritation
Skin
Causes skin irritation. Prolonged or repeated contact of clothing impregnated with the material may cause dermatitis. Symptoms may include redness, rash, swelling, dryness and cracking of the skin.

Eyes
Eye irritation is possible. The results are based on data for components or similar products

Respiratory tract
If the material smokes or emits vapors when heated, their effects may cause some irritation of the mucous membranes and upper respiratory tract. The results are based on data for components or similar products

Sensitization
Skin
There is no evidence that the product or its components cause skin sensitization

Respiratory tract
There is no evidence that the product or its components may be airway sensitizers.

Eyes
There is no evidence that the product or its components cause eye sensitization

Chronic toxicity
No data available

Benzenesulfonic acid, mono-C16-24-alkyl derivatives., Calcium salts CAS # 70024-69-0
Acute toxicity
Orally
The half-life dose of LD_{50} is more than 16,000 mg / kg for rats

Dermal
The semi-lethal dose of LD_{50} for rats is more than 4000 mg / kg

Inhalation
The semi-lethal concentration of LC_{50} is more than 1.9 mg / l when exposed to the whole body for 4 hours

Irritation
Skin
May cause mild skin irritation. The results are based on data for components or similar products. Prolonged or repeated contact of clothing impregnated with the material may cause dermatitis. Symptoms may include redness, rash, swelling, dryness, and cracking of the skin.

Eyes
No eye irritation is expected. The results are based on data for components or similar products

Respiratory tract
If the material smokes or emits vapors when heated, their effects may cause some irritation of the mucous membranes and upper respiratory tract. The results are based on data for components or similar products

Sensitization
Skin
There is no evidence that the product or its components cause skin sensitization

Respiratory tract
There is no evidence that the product or its components may be airway sensitizers.

Eyes
There is no evidence that the product or its components cause eye sensitization

Chronic toxicity
NOEL is defined as 1000 mg / kg / day for rats

Carcinogenicity
No data available

Mutagenicity
No data available

Reproductive toxicity
NOAEL 160 mg / kg / day. The results are based on data for components or similar products

Other information
Other health threats are unknown

SECTION 12: Environmental Safety

12.1 Toxicity

Freashwater fish
The acute semi-lethal concentration of LC_{50} exceeds 1000 mg / L. Results are based on data from components or similar products.

Freshwater spineless
The acute semi-lethal EC_{50} concentration is 100 - 1000 mg / l. Chronic effect at a concentration of 1 - 10 mg / l.
Results are based on data from components or similar products.

Seaweed
The acute semi-lethal EC_{50} concentration is 10 - 100 mg / l. Results are based on data from components or similar products.

Sea fish
No determination was made.

Marine spineless
No determination was made.

Bacteria
No determination was made.

12.2 Persistence and tendency to degradation
Difficult to biodegrade. Results are based on data from components or similar products.

12.3 Bioaccumulation potential
Unspecified

12.4 Mobility in soil
Due to its reduced water solubility, the product is mainly separated mechanically in biological treatment plants. Results are based on data from components or similar products.

12.5 Result of PBT and vPvB assessment
Absent

12.6 Other side effects

Unknown

SECTION 13: Disposal recommendations

13.1 Waste treatment methods

Recommendation

Cannot be disposed of with household waste. Do not allow to enter sewers and waterways.

Waste (unused products)

Waste oils and waste liquid fuels; Waste from the engine, gearbox, mineral based lubricants from the engine, gearbox, grease are hazardous waste.

Disposal of uncleaned packaging and recommended cleaning products

Packaging that cannot be cleaned must be recycled. Dispose of in accordance with official regulations.

SECTION 14: Transport safety requirements

14.1 UN Number

ADR/RID not regulated
ICAO not regulated
IMDG not regulated

14.2 UN exact shipping name

ADR/RID not regulated
ICAO not regulated
IMDG not regulated

14.3 Hazard classes of goods being transported

ADR/RID not regulated
ICAO not regulated
IMDG not regulated

14.4 Packaging

ADR/RID not regulated
ICAO not regulated
IMDG not regulated

14.5 Harmful impact on the environment

ADR/RID not regulated
ICAO not regulated
IMDG not regulated

14.6 Special precautions for users

Check eligibility before transporting material at elevated temperatures.

14.7 Transportation in bulk is carried out in accordance with Appendix II of the International Convention for the Prevention of Water Pollution 73/78 and IBC standards

Unspecified

SECTION 15: Regulatory information

15.1 Regulatory provisions concerning the safety, health and environment of the middle / legislation

Global Chemical Inventories

Australia	All components are in accordance with the Australian Chemical Designation Requirements.
Canada	All components are in accordance with the Canadian Environmental Protection Act and are on the List of Substances Permitted for Import.
China	All components of this product are listed on the China Existing Chemicals List.
EU	For more information on the compliance of this product with the REACH directive, please send your request to the address provided in section 1.
Japan	All components are in compliance with Japan Chemicals Control Law.
Korea	All components are in accordance with Korean regulations.
New Zealand	All components meet New Zealand chemical requirements.
The Philippines	All components are in compliance with the Philippine Toxic and Hazardous Substances and Nuclear Waste Control Act 1969 (R.A. 6969).
Switzerland	All components are in accordance with the Swiss List of Substances Hazardous to the Environment.

The USA All components of this material are TSCA compliant or uncontrolled.

Water safety classes in Germany

Water pollution class WGK = 2 in accordance with the Aquatic Hazard Directive, VwVwS, dated 17 May 1999.

15. 2 Chemical restrictions

Chemical safety assessment has not been carried out.

SECTION 16: Other information

Created

Chief Technologist Department of LLC JV YUKOIL

Date of creation

05/03/2021

Risk guidelines (R Phrases)

R36 – Irritating to eyes

R38 – Irritating to eyes

R41 – Risk of serious damage to eyes

R51/53 – Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Important Risk Statements

H315 – Causes skin irritation

H318 – Causes serious eye damage

H319 – Causes serious eye irritation

H411 – Toxic to aquatic life with long lasting effects

Additional information

The above data applies only to the specified product, but they become invalid if the product is used in conjunction with other materials or processed. The data correspond to our current state of knowledge and experience, but they do not constitute a guarantee of the product quality, but only serve to describe the product and do not form the basis of the contractual relationship. Applicable laws and regulations must be respected by the recipient of our products at their own risk.

(Data for Hazardous Ingredients was taken from the latest version of the supplier's safety data sheets.)