according to Regulation (EU) No. 453/2010

#### YUKO SYNTHETIC 5W-40

## 1. Identification of the substance/preparation and of the company

#### 1.1 Identification of the substance or preparation

# YUKO SYNTHETIC 5W-40 according to TU.U 23.2-31852954-029:2007

#### 1.2 Use of the substance/preparation

Motor oil for gasoline and diesel engines of internal combustion

1.3 Company/undertaking identification

Company name: JV Yukoil Ltd. Street: 3A. Bazovaya

Place: Zaporozhye City, Ukraine

Telephone: +380 61 7174230 Telefax: +380 61 2228032

Contact person: Technical Department e-mail: info@yukoil.com
Internet: www.yukoil.com
Inquiry office: Technical Department
1.4.Emergency telephone: +380 61 2705081

#### 2. Hazards identification

## 2.1 Classification of matters and mixtures

# According to directive (EC) No 1272/2008 with included amendments and annexes this product is not considered dangerous

#### 2.2 Elements on marking

(EC) No 1272/2008, 67/548/EK or 1999/45 EK

## The product is not the subject to mandatory marking according to EC directives

## 2.3 Other risk factors

Following symptoms may occur: allergic reaction

Product evaporation may cause irritation of respiratory tracts, skin and eyes

Do not allow uncontrolled leakage of product into the environment.

Harmful if swallowed.

## 3. Composition/information on ingredients

### 3.1 Mixtures

(EC) No 1272/2008

## Hazardous components

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№ European Commission	CAS-number	Percentage (mass)	Name	Classification			
283-392-8	01-2119493626-26	from 0,40 % to 0,80 %	Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts	Aquatic Chronic 2; H411			
274-263-7	01-2119492616-28	from 0,43 % to 1,00 %	Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	Eye Irrit. 2; H319			

#### 67/548/EK or 1999/45/EK

#### Hazardous components

№ European Commission	CAS-number	Percentage (mass)	Name	Classification
283-392-8	01-2119493626-26	from 0,40 % to 0,80 %	Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts	N Xi R38 R41 R51/53
274-263-7	01-2119492616-28	from 0,43 % to 1,00 %	Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	Xi R36

Full text of each relevant R phrase can be found in heading 16.

## **Further Information**

DMSO-Extrakt < 3 %, IP 346.

Concentration of PCBs < 1mg/kg.

according to Regulation (EU) No. 453/2010

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Classification system: The classification corresponds to the current EC lists and is completed by information from specialist literature and company information.

#### 4. First aid measures

#### 4.1 First aid measures description

#### After inhalation

Move victim to fresh air. Put victim at rest and keep warm. Seek medical attention if problems persist.

#### After contact with skin

After contact with skin, wash immediately with plenty of Water and soap. Change contaminated clothing. In case of skin irritation, seek medical treatment.

## After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

#### After ingestion

Do not induce vomiting. Rinse mouth immediately and drink large quantities of water. Immediately get medical attention.

# 4.2 Most important syndromes and effects, the acute and the late

Refer to heading 11

## 4.3 Prescription to emergency cases treatment

Information for doctor: symptomatic treatment

## 5. Fire-fighting measures

#### 5.1 Suitable extinguishing media

Foam. Extinguishing powder. Carbon dioxide (CO2). Atomized water.

## Extinguishing media which must not be used for safety reasons

High power water jet.

5.2 Special exposure hazards arising from substance or preparation itself, combustion products, resulting gases Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO2). Sulfur oxides. Phosphorus oxides.

#### 5.3 Fire fighting guideline

Special protective equipment for fire-fighters

In case of fire: Wear self-contained breathing apparatus.

## Additional information

Extinguishing materials should be selected according to the surrounding area. Use water spray/stream to protect personnel and to cool endangered containers. In case of fire and/or explosion do not breathe fumes. Contaminated fire-fighting water must be collected separately.

## 6. Accidental release measures

## 6.1 Personal precautions

High slip hazard because of leaking or spilled product. Remove all sources of ignition. Wear respiratory protection when in the presence of vapor, dust, and aerosols.

## 6.2 Environmental precautions

Do not empty into drains or the aquatic environment. In case of gas being released or leakage into waters, ground or the drainage system, the appropriate authorities must be informed. Prevent spreading over great surfaces (e.g. by damming or installing oil booms).

# 6.3 Methods for cleaning up/taking up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the assimilated material according to the section 13 on waste disposal.

## 6.4 Reference to other chapters

See additional information under headings 7, 8 and 13

# 7. Handling and storage

## 7.1 Safety handling measures

Advice on safe handling

Avoid: skin contact, eye contact, inhalation. Provide good ventilation in working area

#### Hygiene measures

Wash hands properly at breaks and after work.

Use protective hand cream.

If spilled on clothes, put them off and wash properly before next use.

## Advice on protection against fire and explosion

according to Regulation (EU) No. 453/2010

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Remove all sources of ignition.

#### 7.2 Storage

Requirements for storage rooms and vessels

Keep the packing dry and well sealed to prevent contamination and absorption of dampness.

#### Advice on storage compatibility

Keep away from food, drink and animal feed stuff. Keep away from: Oxidizing agents.

#### Further information on storage conditions

Recommended storage temperature: 20±10°C. Protect against: heat. UV-radiation/sunlight.

#### 8. Exposure controls/personal protection

## 8.1 Exposure limit values

Additional advice on control parameters

## Contains mineral oil. Can create oil aerosol mist

Recommended limit value for oil mist TWA: 5 mg/m³ STEL: 10 mg/m3

The product does not contain any relevant quantities of substances with legally established exposure limitation.

## 8.2 Exposure controls

#### Occupational exposure controls

Provide for sufficient ventilation and punctiform air suction at critical points.

## Protective and hygiene measures

Wash hands before breaks and at the end of work. Take off immediately all contaminated clothing. Wash contaminated clothing prior to re-use. Do not eat, drink, smoke or sneeze at the workplace.

#### Respiratory protection

If technical suction or ventilation measures are not possible or are insufficient, protective breathing apparatus must be worn.

#### Hand protection

Tested protective gloves are to be worn: Deutsche Industry Norms (DIN) / European Norms (EN): EN 374

Suitable material: NBR (Nitrile rubber).

## Eye protection

Tightly sealed safety glasses. Deutsche Industry Norms (DIN) / European Norms (EN): EN 166

### Skin protection

Wear suitable protective clothing.

## 9. Physical and chemical properties

#### General information

Physical state: liquid

Color: brownish yellow Odour: specific, not irritating

Flash point: 200 °C

Water solubility: virtually insoluble Viscosity / kinematic: virtually insoluble > 12,8 sSt (at 100 °C)

Ignition temperature: > 250 °C

Density (at 20 °C): 0,873 g/cm³

Pour point: minus 35°C

The above data are typical and are not the specification of the product

#### 10. Stability and reactivity

#### 10.1 Reactivity

Read carefully information in chapters 10.2-10.6

#### 10.2 Stability

The material is usually stable at ambient temperature and pressure. See details under heading 7

## 10.3 Dangerous reactions possibility

None

## 10.4 Conditions to avoid

Refer to chapter 7 No further action is necessary. Do not overheat to avoid decomposition by heat.

#### 10.5 Materials to avoid

Reacts with: Oxidizing agents, strong. acid.

## 10.6 Hazardous decomposition products

Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO2). Sulfur oxides. Phosphorus oxides.

Thermal decomposition

according to Regulation (EU) No. 453/2010

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Smoke, carbon monoxide (CO<sub>2</sub>), aldehydes and other products of incomplete combustion. Sulfur and Phosphorus oxides, hydrogen sulfide, alkylmercaptans and sulfides may expose

## 11. Toxicological information

#### 11.1 Information of toxicological effects

Acute toxicity

## Orally

Half lethal doze LD50 for white rats more than 5000 mg/kg. Based on data for components or equivalent products.

#### Dermal

Half lethal doze LD50 for rabbits more than 2000 mg/kg. Based on data for components or equivalent products

#### Inhalation

No data available

## Damage/irritation of skin

May cause light skin irritation. Based on data for components or equivalent products

Irritant effect on the skin: Prolonged/repeated skin contact may cause skin defatting or dermatitis.

#### Serious impact/damage of eyes

Irritant effect on the eye: Not an irritant. Based on data for components or equivalent products

#### Irritating effects on respiration

If the material release smoke or mist at heating, it may cause certain irritation of upper respiration tracts mucous.

#### Sensitizing effects on respiration and skin

Skin

No data available

#### Respiration

No data available

#### Sex cells mutagenesis

No data available for genotoxicity of the product or its components in concentration above 0,1%

## Carcinogenicity

This stuff considered to contain high refined naphthenic product and is not thus carcinogenic according to IARC. All the oils in this product contain less than 3% of extractable matters according to IP 346 test.

## Reproductive toxicity

No data available that the product or its components affect the reproductive function if concentration exceed 0,1%

## Product toxicity for specific organ (STOT) at repeated impact

No data available that the product or its components cause chronic effect if concentration exceeds 1%

## Other information

No data available of other health dangers

## 12. Ecological information

## 12.1 Ecotoxicity

## Fresh water fish

Acute lethal concentration LC50 exceeds 1000 mg/L. Based on data for components or equivalent products

#### Fresh water invertebrates

Acute average effective doze EC50 is 100-1000 mg/L. Chronic effect at concentration 1-10 mg/L. Based on data for components or equivalent products

## Water weeds

Acute average effective doze EC50 is 10-100 mg/L. Chronic effect at concentration 1-10 mg/L. Based on data for components or equivalent products

## Sea fish

No data available

#### Sea invertebrates

No data available

## Bacteria

No data available

# 12.2 Persistence and degradability

Not easily bio-degradable (according to OECD-criteria). Do not empty into drains or the aquatic environment.

#### 12.3 Bio accumulative potential

No data available

## 12.4 Mobility in soil

Due to its low solubility in water the product is almost completely mechanically separated in biological waste water treatment facilities. Based on data for components or equivalent products

#### 12.5 PBT и vPvB estimation results

None

according to Regulation (EU) No. 453/2010

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#### 12.6 Other adverse effects

No data available

#### 13. Disposal considerations

#### 13.1 Advice on disposal

Must not be disposed of with domestic waste. Do not empty into drains or the aquatic environment.

## Waste disposal number of waste from residues/unused products

130205 OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05, 12 and 19); waste engine, gear and lubricating oils; synthetic engine, gear and lubricating oils Classified as hazardous waste.

## Contaminated packaging

Packing which cannot be properly cleaned must be disposed. Waste disposal according to official state regulations.

#### 14. Transport information

14.1 UN number:

ADR/RID class: not regulated **ICAO** not regulated **IMDG** not regulated

14.2 UN exact shipping name

ADR/RID class: not regulated **ICAO** not regulated **IMDG** not regulated 14.3 Hazard class of transported cargoes ADR/RID class: not regulated not regulated **ICAO IMDG** not regulated

14.4 Packaging

ADR/RID class: not regulated not regulated **ICAO IMDG** not regulated

14.5 Impact on environment

ADR/RID class: not regulated **ICAO** not regulated **IMDG** not regulated

## 14.6 Special precaution for users

Check qualification requirements before transporting material at high temperatures

## 14.7 Big batches transportation are carried out according to Supplement II of International Convention for the Prevention of Water Pollution 73/78 and IBC

Not defined

#### 15. Regulatory information

## 15.1 Regulatory norms on security, health and environment/legislation on materials and mixtures

Global Chemical Inventories

Australia All components comply with requirements of labeling chemicals of Australia All components comply with the Canadian Environment Protection Law and are in Canada

the list of materials allowed for import.

All components of the product are enlisted in the Chinese Inventory of existing China

chemical.

ΕU For additional information of the product conformity with REACH directives send the

inquiry to the address in chapter 1.

Japan All components comply with the Japanese Law of Chemical Materials Control

Korea All components comply with Korean norms

All components comply with the requirements applicable to chemical compounds in New

**New Zealand** Zealand

**Philippines** All components conform to Philippine Law of Toxic & Hazardous Materials and

Nuclear Waste Control of 1969 (R.A. 6969)

Switzerland All components comply with the Swiss Inventory of Environmentally Hazardous

Materials

USA All components comply with TSCA Law or not regulated

according to Regulation (EU) No. 453/2010

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Hazardous class for water stock of Germany

Water contaminating class WGK=2 according to Directive VwVwS, of May 17, 1999 15.2 Chemical safety estimation

Chemical safety estimation was not carried out

#### 16. Other information

Elaborated by: Chief Technologist Department of «JV YUKOIL» Ltd. Printing Date 08.08.2013

## Full text of R-phrases

- 36 Irritant to eyes
- 38 Irritant to skin.
- 41 Risk of serious damage to eyes.
- 51/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment
- H319 Cause serious eyes irritation
- H411 Toxic to water organisms with long term effects

## **Further Information**

These given data only refer to the named product. If the product is used together with other materials or in manufacturing processes the data might not be applicable any more. The data are based on today's state of our knowledge and experience. They are, however, no guarantee of any specific product properties and do not established any legally valid contractual relationship.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.