MOTOR'S LIVE	**MATERIAL SAFETY DATA SHEET** **MOTORS LIVE 20W50**

1-IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

IDENTIFICATION OF SUBSTANCE

1.1 PRODUCT İDENTİFİER

MOTORS LIVE 20W50

2-COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL COMPOSITION AND HAZARDOUS COMPONENTS

CAS NO:	EINECS NO:	CHEMICAL COMPOSİTİON	CONCENTRATION	RISK PHRASES
74869-22-0	278-012-2	Lubricating oils (petroleum), Base oils;undefined	%100	-

The highly refined mineral oils contains <3 (w/w) DMSO extract according to IP 346.

3-HAZARDS IDENTIFICATION

Physical / Chemical hazards : Not classified as dangerous

Human Health Hazards : Not classified as dangerous

Environmental Hazards : Unlikely to be harmful to aquatic organisms.

4-FIRST - AID MEASURES

4.1 EYES

Wash eye thoroughly with copious quantities of water, ensuring eyelids are held open. Obtain medical advice if any pain or redness develops or persists.

If hot material enters the eye, flood immediately with cold water to dissipate the heat, if possible, ensuring eyelids are held open. Take the casualty to hospital for examination and treatment without delay.

4.2 SKIN

Wash skin thoroughly with soap and water as soon as reasonably practicable. Remove heavily contaminated clothing and wash underlying skin.

If hot product causes burns, the affected area should be flooded immediately with, or immersed in cold water for 10 minutes, or longer if pain persists. Burns should be covered with clean cotton or gauze, and the casualty taken to hospital as soon as possible for examination and treatment.

Never use gasoline, kerosene or other solvents to remove fuel oil from skin or clothing.

4.3 INGESTION

If contamination of the mouth occurs, wash out thoroughly with water.

Except as a deliberate act, the ingestion or large amounts of product is unlikely. If it should occur, do not induce vomiting; obtain medical advice.

4.4 INHALATION

If inhalation of mists, fumes or vapour causes irritation to the nose or throat, or coughing, remove to fresh air. If symptoms persist obtain medical advice.

4.5 MEDICAL ADVICE

If ingested, do not induce vomiting. There are no specific antidotes or other therapeutic measures, treat symptomatically.

5-FIRE-FIGHTING MEASURES

For major fires call the Fire Service. Ensure an escape path is always available from any fire. Use foam, dry powder or water fog. DO NOT USE water jets. Avoid spraying directly into storage containers because of the danger of boil-over.

Fires in confined spaces should be dealt with by trained personnel wearing approved breathing apparatus.

6-ACCIDENTAL RELEASE MEASURES

Ensure good ventilation.

Wear protective clothing.

Protect drains from spills and prevent entry of product.

Scrape up bulk of solid material and remove liquid with sand or other suitable inert absorbent material. If necessary, clean the contaminated area using hot water and detergent: absorb the washings-do not wash into drains.

Spilled material may make surfaces slippery.

Recovery of large spillages should be effected by specialist personnel.

It is advised that stocks of suitable absorbent material should be held in quantities sufficient to deal with any spillage which may be reasonably anticipated.

Large and uncontained spillages should be smothered with foam to reduce the risk of ignition. The foam blanket should be maintained until the area is declared safe.

Vapour may collect in any confined space.

In the case of spillage on water, prevent the spread of product by the use of suitable barrier equipment. Recover product from the surface. Protect environmentally sensitive areas and water supplies.

In the event of spillages contact the appropriate authorities.

7-HANDLING AND STORAGE

7.1 STORAGE CONDITIONS

Store and dispense only in well ventilated areas away from heat and sources of ignition.

Store and use only in equipment/containers designed for use with this product.

Containers must be properly labelled and kept closed when not in use.

Do not remove warning labels from containers

Empty packages may contain some remaining product. Retain hazard warning labels on empty packages as a guide to the safe handling, storage and disposal of empty packaging.

Do not enter storage tanks without breathing apparatus unless the tank has been well ventilated and the tank atmosphere has been shown to contain hydrocarbon vapour concentrations of less that 1% of the lower flammability limit and an oxygen concentration of at least 20% volume.

7.2 HANDLING PRECAUTIONS

Ensure good ventilation and avoid as far as reasonably practicable the inhalation and contact with vapours, mists or fumes which may be generated during use.

Avoid contact with skin and observe good personal hygiene.

Avoid contact with eyes. If splashing is likely to occur wear a full face visor or chemical goggles as appropriate.

Wash hands thoroughly after contact.

Use disposable cloths and discard when soiled. Do not put soiled cloths into pockets.

7.3 FIRE PREVENTION

Light hydrocarbon vapours can build up in the headspace of tanks. Avoid static electrical discharge and all ignition sources during filling, ullaging and sampling from storage tanks. Will present a flammability hazard if heated above flash point but bulk liquids at normal storage temperatures will present virtually no fire hazard. If fuel contacts hot surfaces, or leaks from high pressure fuel pipes, the vapour and/or mists generated will create a flammability hazard.

When the product is pumped (e.g. during filling, discharge or ullaging) and when sampling, there is a risk of static discharge. Ensure equipment used is properly earthed or bonded to the tank structure.

Product contaminated rags, paper or material used to absorb spillages, represent a fire hazard, and should not be allowed to accumulate. Dispose of safely immediately after use.

Empty containers represent a fire hazard as they may contain some remaining flammable product and vapour. Never cut, weld, solder or braze empty containers.

8-EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 EXPOSURE LIMITS

There is no appropriate occupational exposure limit for this material.

Ensure good ventilation.

Avoid inhalation of vapour, mists or fumes generated during use.

If vapour, mists or fumes are generated, their concentration in the workplace air should be controlled to the lowest reasonably practicable level.

8.2 EXPOSURE CONTROL

8.2.1 PROTECTIVE CLOTHING

Wear face visor or goggles in circumstances where eye contact can accidentally occur.

If skin contact is likely, wear impervious protective clothing and/or gloves.

Protective clothing should be regularly inspected and maintained; overalls should be dry-cleaned, laundered and preferably starched after use.

8.2.2 RESPIRATORY PROTECTION

If operations are such that exposure to vapour, mist or fume may be anticipated, then suitable approved respiratory equipment should be worn.

The use of respiratory equipment must be strictly in accordance with the manufacturer's instructions and any statutory requirements governing its selection and use.

9-PHYSICAL AND CHEMICAL PROPERTIES

	UNIT	VALUES	TEST METHOD
Physical State	-	Liquid	-
Colour	-	Yellow	ASTM D 6045
Density, @15 ºC	Kg/cm3	0,88-0,90	ASTM D 5002
Flash Point (ºC)	ºC	Min.220	ASTM D92
Viscosity (100 ºC'de)	mm^2/s	16,3-21.9	ASTM D445
Pour Point	ºC	-21	ASTM D6749

10- STABILITY AND REACTIVITY

Stable at ambient temperature.

10.1 MATERIALS TO AVOID: Avoid contact with strong oxidizing agents.

10.2 HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition products will vary with conditions.

11-TOXICOLOGICAL INFORMATION

11.1. EYES

Unlikely to cause more than transient stinging or redness if accidental eye contact occurs.

Will cause burns if hot material contacts eyes.

11.2 SKIN

Long term and repeated exposure may cause skin irritation.

Will cause burns if hot material contacts skin.

11.3 INGESTION

There isn't any knowledge.

11.4 INHALATION

May cause irritation to eyes, nose and throat at high vapour concentrations.

12-ECOLOGICAL INFORMATION

Spillages may penetrate the soil causing ground water contamination.

This product is inherently biodegradable.

Harmful to aquatic organisms, may cause long term effects in the aquatic environment.

Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

13- DISPOSAL CONSIDERATIONS

Dispose of by incineration or other suitable means under conditions approved by the local authority or via a licensed waste disposal contractor.

At sea, used or unwanted product should be stored for eventual discharge into port approved waste oil disposal facilities.

14- TRANSPORT INFORMATION

Not classified as hazardous for transport (ADR, RID, UN, IMO, IATA/ICAO).

15-REGULATORY INFORMATION

EU CATEGORY OF DANGER: Under the criteria of EEC/67/548 and EEC/99/45 not classified as dangerous.

16- OTHER INFORMATION

The information presented about health, safety and environment issues in this safety data sheet was given by considering of best knowledge and reliable sources at the date of its preparation. Although maximum effort was shown, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Health and safety precautions and environmental advice noted in this data sheet may not be accurate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as a permission, recommendation or authorization given or implied to practise any patented invention without a valid licence. The MOTORS LIVE shall not be responsible for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material.