MATERIAL SAFETY DATA SHEET

MOTRON - INDUSTRIAL GEAR OIL ISO 320

SECTION 01 - IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY / UNDERTAKING

PRODUCT: **MOTRON** - INDUSTRIAL GEAR OIL ISO 320
CHEM NAME: MIXTURE (SEE SECTION 2)
CHEM FAMILY: PETROLEUM HYDROCARBON, GEAR OIL.
HEALTH HAZARD: NON-HAZARDOUS SUBSTANCE, NON-DANGEROUS GOODS

Application

For used in industrial application.
For specific application advice, see appropriate Technical Data Sheet

REPO

SECTION 02 - COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical composition
Highly refined mineral based oil

Composition	Cas no	Percent
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil based	72623-87-1	95-96
Performance Additives	Mixture	1.5-3
Zink alkyl dithiyophosphate	68649-42-3	<1
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts	84605-29-8	<0.25

SECTION 03 – HAZARDS IDENTIFICATION

This material is not considered to be Hazardous but should be handled in accordance with good industrial hygiene and safety practices.

SECTION 04 – FIRST AID MEASURES

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

Skin

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

Ingestion

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

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

Inhalation

If inhalation of mist, fumes or vapor causes irritation to nose or throat, or coughing removes fresh air.

If symptoms persist, obtain medical advice.

Medical advice

Treatment should in general be symptomatic and directed to relieving any effects.

SECTION 05 – FIRE FIGHTING MEASURES

Use foam, dry power or water fog. Do not use water jets.

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

Water may be used to cool nearby heat exposed Areas/object/packages. Avoid spraying directly into storage containers because of the danger of boil-over

Combustion products

Toxic fumes may be evolved on burning or exposure to heat.

See stability and reactivity, section 10 of this Safety Data Sheet.

SECTION 06 – ACCIDENTAL RELEASE MEASURES

Contain and recover spilled material using sand or other suitable inert absorbent material.

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

Spilled material may make surface slippery.

Protect drains from potential spills to minimize contamination. Do not wash product into drainage system.
In case of large spills, contact appropriate authorities.
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.

SECTION 07 - HANDLING AND STORAGE

Avoid contact with eyes. If splashing is likely to occur wear a full face visor or chemical goggles as appropriate. Avoid frequent or prolonged skin contact with fresh or used products.
Good working practices, high standards of personal hygiene and plant cleanliness must be maintained at all times. Wash hands thoroughly after contact.
Use disposable cloth and discard when solid. Do not put soiled cloth into pockets.

Fire prevention
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.

Storage condition
Store the products under cover away from heat and sources of ignition.

SECTION 08 – EXPOSURE CONTROLS & PERSONAL PROTECTION

Exposure Limits
There is no appropriate occupational exposure limit for this material.
Ensure good ventilation.
Avoid as far as reasonably practicable inhalation of vapour, mists or fumes generated during use.
If vapour, mists or fumes are generated, their concentration in the work place air should be controlled to lowest reasonably practicable level.

Protecting clothing
Wear face wiser or goggles in circumstances where eye contact can accidentally occur.
If skin contact is likely, wear impervious protective clothing and/or gloves.
Heavily contaminated clothing as soon as reasonably practicable; dry clean, launder and preferably starch before re-use. Wash any contaminated underlying skin with soap and water.

Respiratory protection
Respiratory protection is unnecessary, provided the concentration of vapour mists or fumes is adequately controlled. The use of respiratory equipment must be strictly in accordance with the manufacturers in statutory requirements governing its selection and use.

SECTION 09 – TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

Tests	Method	Results
Appearance	Visual	Clear & Bright
Water	Hot Plate	Nil
Color	D-1500	L3.5
Density @ 15 °C, Kg/L	D-1298	0.8915
Viscosity @ 100 °C, cst	D-445	24.45
Viscosity @ 40 °C, cst	D-445	320
Viscosity index	D-2270	97
Flash Point, °C (COC)	D-92	244
Pour Point, °C	D-97	-16
Foam SEQ.I/II/III	D-892	0/0/0

SECTION 10 – STABILITY & REACTIVITY

Products of this type are stable and unlikely to react in a hazardous manner under normal conditions of use. Hazardous polymerization reaction will not occur.

Materials to avoid
Avoid contact with strong oxidizing agents.

Hazardous decomposition product
Thermal decomposition products will vary with conditions.
Incomplete combustion will generate smoke, carbon dioxide and hazardous gases, including carbon monoxide, hydrogen sulphide and oxides of sulphur and phosphorus.

SECTION 11 – TOXICOLOGICAL INFORMATION

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

Skin
Unlikely to cause harm to the skin on brief or occasional contact but prolonged or repeated exposure may lead to dermatitis.

Used oils
Combustion products resulting from the operation of internal combustion contaminate oils during use. Used oil may contain hazardous components which have the potential to cause skin cancer. Frequent or prolonged contact with all types and makes of used oil must therefore be avoided ABD a high standard of personal hygiene maintained.

Ingestion
Unlikely to cause harm if accidentally swallowed in small doses through larger quantities may cause nausea and diarrhea.

Inhalation
At normal ambient temperatures this product will be to present an inhalation hazard of its low volatility may cause irritation to eyes nose and throat due to exposure to vapour, mists or fumes may be harmful by inhalation if exposure to vapour, mists or fumes resulting from thermal decomposition product occurs.

SECTION 12 – ECOLOGICAL INFORMATION

Mobility
Spillages may penetrate the soil causing ground water contamination.

Persistence and degradability
This product is inherently bio-gradable.

Bio accumulative potential
There is no evidence to suggest bioaccumulation will occur.

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

SECTION 13 – DISPOSAL CONSIDERATION

Where possible, arrange for product to be recycled.
Dispose of via an authorized person / licensed waste disposal contractor in accordance with local regulations. Incineration may be carried or under controlled conditions provided that local regulations for emissions are met.

SECTION 14 – TRANSPORT INFORMATION

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

SECTION 15 – REGULATORY INFORMATION

Not classified as hazardous for supply.

SECTION 16 – OTHER INFORMATION

This data sheet and the health safety and environmental information it contains is considered to be accurate as of the date specified below. We have reviewed any information contained herein which we received from sources outside of the company. However no warranty or representation, express or implied is made is made as to the accuracy or completeness of the data and information contained in this data sheet.

Health and safety precaution 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 used 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 practice any planted invention without a valid license. The company 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 hazard inherent in the nature of the material.