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# SAFETY DATA SHEET

#### **SECTION 1**

# PRODUCT AND COMPANY IDENTIFICATION

As of the revision date above, this (M)SDS meets the regulations in the United Kingdom & Ireland.

**PRODUCT** 

Product Name: MOBIL RARUS 827

**Product Description:** Synthetic Base Stocks and Additives **Product Code:** 201560203010, 400361, 606244-60

Intended Use: Compressor oil

**COMPANY IDENTIFICATION** 

Supplier: EXXONMOBIL LUBRICANTS & SPECIALTIES EUROPE, A DIVISION OF EXXONMOBIL

PETROLEUM & CHEMICAL, BVBA (EMPC)

POLDERDIJKWEG B-2030 Antwerpen

Belgium

24 Hour Environmental / Health Emergency

(UK) 01372 222 000 / (IRELAND) 44 1372 222 000

**Telephone** 

**SECTION 2** 

# **COMPOSITION / INFORMATION ON INGREDIENTS**

This material is regulated as a preparation.

Reportable Hazardous Substance(s) or Complex Substance(s)

Name	CAS#	EINECS / ELINCS	Concentration*	Symbols/Risk Phrases
1,2-Benzenedicarboxylic acid, ditridecyl ester	119-06-2	204-294-3	20 - 30%	None
N-PHENYL-1-NAPHTHYLAMINE	90-30-2	201-983-0	< 1%	Xn;R22, Xi;R43, N;R50/53
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	68411-46-1	270-128-1	1 - 5%	R52/53

<sup>\*</sup> All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

# **SECTION 3**

# HAZARDS IDENTIFICATION

This material is dangerous according to regulatory guidelines (see (M)SDS Section 15).

CLASSIFICATION: | R52/53 |

# **HEALTH HAZARDS**

Low order of toxicity. Excessive exposure may result in eye, skin, or respiratory irritation. High-pressure injection under skin may cause serious damage.

### **ENVIRONMENTAL HAZARDS**

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



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**Note:** This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

### **SECTION 4**

### **FIRST AID MEASURES**

### **INHALATION**

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

### **SKIN CONTACT**

Wash contact areas with soap and water. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

#### **EYE CONTACT**

Flush thoroughly with water. If irritation occurs, get medical assistance.

#### **INGESTION**

First aid is normally not required. Seek medical attention if discomfort occurs.

### **SECTION 5**

### **FIRE FIGHTING MEASURES**

# **EXTINGUISHING MEDIA**

**Appropriate Extinguishing Media:** Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

Inappropriate Extinguishing Media: Straight streams of water

#### **FIRE FIGHTING**

**Fire Fighting Instructions:** Evacuate area. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

**Hazardous Combustion Products:** Smoke, Fume, Oxides of carbon, Sulphur Oxides, Incomplete combustion products, Aldehydes

#### FLAMMABILITY PROPERTIES

Flash Point [Method]: >220°C (428°F) [ ASTM D-92]

Flammable Limits (Approximate volume % in air): LEL: 0.9 UEL: 7.0

Autoignition Temperature: N/D



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# **SECTION 6**

### **ACCIDENTAL RELEASE MEASURES**

#### NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

#### SPILL MANAGEMENT

Land Spill: Stop leak if you can do so without risk. Recover by pumping or with suitable absorbent.

**Water Spill:** Stop leak if you can do so without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

# **ENVIRONMENTAL PRECAUTIONS**

Large Spills: Dyke far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

# **SECTION 7**

# HANDLING AND STORAGE

# **HANDLING**

This material is not intended for use in air compressors for breathing applications. Prevent small spills and leakage to avoid slip hazard.

Static Accumulator: This material is a static accumulator.

# **STORAGE**

Do not store in open or unlabelled containers.

# **SECTION 8**

# **EXPOSURE CONTROLS / PERSONAL PROTECTION**

# **EXPOSURE LIMIT VALUES**

Exposure limits/standards (Note: Exposure limits are not additive)

Substance Name	Form	Limit/St	andard	Note	Source	Year
1,2-Benzenedicarboxylic acid,	Total	TWA	5 mg/m3		ExxonMobil	2006
ditridecyl ester						

**Exposure limits/standards for materials that can be formed when handling this product:** When mists / aerosols can occur, the following are recommended: 5 mg/m³ - ACGIH TLV, 10 mg/m³ - ACGIH STEL.

Information about recommended monitoring procedures can be obtained from the following agency(ies)/institute(s):



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France L'Institut National de Recherche et de Sécurité (INRS) Germany Berufsgenossenschaftliches Institut für Arbeitssicherheit (BIA) UK Health and Safety Executive (HSE)

### **ENGINEERING CONTROLS**

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

No special requirements under ordinary conditions of use and with adequate ventilation.

#### PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

**Respiratory Protection:** If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

No special requirements under ordinary conditions of use and with adequate ventilation.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapour warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

**Hand Protection:** Any specific glove information provided is based on published literature and glove manufacturer data. Work conditions can greatly effect glove durability; inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

No protection is ordinarily required under normal conditions of use.

Eye Protection: If contact is likely, safety glasses with side shields are recommended.

**Skin and Body Protection:** Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.

**Specific Hygiene Measures:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

#### **ENVIRONMENTAL CONTROLS**

See Sections 6, 7, 12, 13.

# **SECTION 9**

### PHYSICAL AND CHEMICAL PROPERTIES

Typical physical and chemical properties are given below. Consult the Supplier in Section 1 for additional data.

## **GENERAL INFORMATION**

Physical State: Liquid

Colour: Amber



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Odour: Characteristic Odour Threshold: N/D

# IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density (at 15.6 °C): 0.957

Flash Point [Method]: >220°C (428°F) [ ASTM D-92]

Flammable Limits (Approximate volume % in air): LEL: 0.9 UEL: 7.0

**Autoignition Temperature: N/D** 

**Boiling Point / Range:** > 316°C (600°F) **Vapour Density (Air = 1):** > 2 at 101 kPa

Vapour Pressure: < 0.013 kPa (0.1 mm Hg) at 20°C Evaporation Rate (N-Butyl Acetate = 1): N/D

pH: N/A

Log Pow (n-Octanol/Water Partition Coefficient): N/D

Solubility in Water: Negligible

Viscosity: 107.2 cSt (107.2 mm²/sec) at 40°C | 10.12 cSt (10.12 mm²/sec) at 100°C

Oxidising properties: See Sections 3, 15, 16.

# OTHER INFORMATION

Freezing Point: N/D Melting Point: N/A

Pour Point: -36°C (-33°F)

### SECTION 10 STABILITY AND REACTIVITY

STABILITY: Material is stable under normal conditions.

**CONDITIONS TO AVOID:** Excessive heat. High energy sources of ignition.

MATERIALS TO AVOID: Strong oxidisers

**HAZARDOUS DECOMPOSITION PRODUCTS:** Material does not decompose at ambient temperatures.

HAZARDOUS POLYMERIZATION: Will not occur.

# SECTION 11 TOXICOLOGICAL INFORMATION

## **Acute Toxicity**

Route of Exposure	Conclusion / Remarks		
INHALATION			
Toxicity: LC50 > 5000 mg/m3	Minimally Toxic. Based on test data for structurally similar materials.		
Irritation: No end point data.	Negligible hazard at ambient/normal handling temperatures.  Based on assessment of the components.		
INGESTION			
Toxicity: LD50 > 2000 mg/kg	Minimally Toxic. Based on test data for structurally similar materials.		
Skin			
Toxicity: LD50 > 2000 mg/kg	Minimally Toxic. Based on test data for structurally similar materials.		



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Irritation: Data available.	Negligible irritation to skin at ambient temperatures. Based on test data for structurally similar materials.
Eye	
Irritation: Data available.	May cause mild, short-lasting discomfort to eyes. Based on test data for structurally similar materials.

### **CHRONIC/OTHER EFFECTS**

#### **Contains:**

Synthetic base oils: Not expected to cause significant health effects under conditions of normal use, based on laboratory studies with the same or similar materials. Not mutagenic or genotoxic. Not sensitising in test animals and humans.

Additional information is available by request.

### **SECTION 12**

# **ECOLOGICAL INFORMATION**

The information given is based on data available for the material, the components of the material, and similar materials.

### **ECOTOXICITY**

Material -- Expected to be harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

#### **MOBILITY**

Majority of components -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

### PERSISTENCE AND DEGRADABILITY

### **Biodegradation:**

Majority of components -- Expected to be inherently biodegradable

# **BIOACCUMULATION POTENTIAL**

Majority of components -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

# **SECTION 13**

# **DISPOSAL CONSIDERATIONS**

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

#### DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

# REGULATORY DISPOSAL INFORMATION

European Waste Code: 13 02 06



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NOTE: These codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use. Waste producers need to assess the actual process used when generating the waste and its contaminants in order to assign the proper waste disposal code(s).

This material is considered as hazardous waste pursuant to Directive 91/689/EEC on hazardous waste, and subject to the provisions of that Directive unless Article 1(5) of that Directive applies.

**Empty Container Warning** (where applicable): Empty containers may retain residue and can be dangerous. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

### SECTION 14

# TRANSPORT INFORMATION

LAND (ADR/RID): Not Regulated for Land Transport

**INLAND WATERWAYS (ADNR)**: Not Regulated for Inland Waterways Transport

SEA (IMDG): Not Regulated for Sea Transport according to IMDG-Code

AIR (IATA): Not Regulated for Air Transport

# **SECTION 15**

### **REGULATORY INFORMATION**

Material is dangerous as defined by the EU Dangerous Substances/Preparations Directives.

**CLASSIFICATION:** Dangerous for the environment.

EU LABELING: No symbol required.

**Nature of Special Risk:** R52/53; Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Advice: S61; Avoid release to the environment. Refer to special instructions/safety data sheets.

Contains: N-PHENYL-1-NAPHTHYLAMINE May produce an allergic reaction.

REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS



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Complies with the following notional/regional chemical inventory requirements. AICS IFCSC DSI

Complies with the following national/regional chemical inventory requirements: AICS, IECSC, DSL, ENCS, KECI, PICCS, TSCA

Special Cases:

Inventory	Status
ELINCS	Restrictions Apply

# SECTION 16 OTHER INFORMATION

# N/D = Not determined, N/A = Not applicable

KEY TO THE RISK CODES CONTAINED IN SECTION 2 AND 3 OF THIS DOCUMENT (for information only):

R22; Harmful if swallowed.

R43; May cause sensitisation by skin contact.

R50/53; Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R52/53; Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

No revision information is available.

The information and recommendations contained herein are, to the best of ExxonMobil's knowledge and belief, accurate

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