



# Safety Data Sheet

## SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier

#### **ALFASYNTH PAO 46**

**Product Number(s):** 71204403

· **Registration number:**

Substances contained in the mixture have already (pre)-registered by the suppliers.

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**

No relevant identified uses-mixture of substances.

· **Application of the substance / the mixture** Lubricant

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Aegean Marine Petroleum S.A.  
10, Akti Kondyli,  
Piraeus, Greece, 185 45  
Tel: (+30) 210 4586000  
Fax: (+30) 210 4586245  
E-mail: [alfalubes@ampni.com](mailto:alfalubes@ampni.com)

**1.4 Emergency telephone number**

Emergency telephone number: 112

## SECTION 2 HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**CLP CLASSIFICATION:** Not classified as dangerous according to EU regulatory guidelines.

### 2.2 Label elements

Under the criteria of Regulation (EC) No 1272/2008 (CLP):  
Not classified

## 2.3 Other hazards Not Applicable

### SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

#### 3.2 Mixtures

This material is a mixture.

COMPONENTS	CAS NUMBER	EC NUMBER	REGISTRATION NUMBER	CLP CLASSIFICATION	AMOUNT
1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters, C10-rich	68515-49-1	271-091-4	**	None	3 - 7 %weight

\*\*Not available or substance is not currently required for registration under REACH.

### SECTION 4 FIRST AID MEASURES

#### 4.1 Description of first aid measures

**Eye:** No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

**Skin:** No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

**Ingestion:** No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

**Inhalation:** No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

#### 4.2 Most important symptoms and effects, both acute and delayed

##### IMMEDIATE SYMPTOMS AND HEALTH EFFECTS

**Eye:** Not expected to cause prolonged or significant eye irritation.

**Skin:** Contact with the skin is not expected to be harmful. High-Pressure Equipment Information: Accidental high-velocity injection under the skin of materials of this type may result in serious injury. Seek medical attention at once should an accident like this occur. The initial wound at the injection site may not appear to be serious at first; but, if left untreated, could result in disfigurement or amputation of the affected part.

**Ingestion:** Not expected to be harmful if swallowed.

**Inhalation:** Not expected to be harmful if inhaled. Contains a synthetic hydrocarbon oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

**DELAYED OR OTHER SYMPTOMS AND HEALTH EFFECTS:** Not classified.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Not applicable.

## SECTION 5 FIRE FIGHTING MEASURES

### 5.1 Extinguishing media

Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.

### 5.2 Special hazards arising from the substance or mixture

**Combustion Products:** Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.

### 5.3 Advice for firefighters

This material will burn although it is not easily ignited. See Section 7 for proper handling and storage. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Eliminate all sources of ignition in vicinity of spilled material. Refer to Sections 5 and 8 for more information.

### 6.2 Environmental precautions

Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater.

### 6.3 Methods and material for containment and cleaning up

Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil and dispose of in a manner consistent with applicable requirements. Place other contaminated materials in disposable containers and dispose of in a manner consistent with applicable requirements. Report spills to local authorities as appropriate or required.

### 6.4 Reference to other sections

See sections 8 and 13.

## SECTION 7 HANDLING AND STORAGE

### 7.1 Precautions for safe handling

**General Handling Information:** Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

**Precautionary Measures:** Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Wash thoroughly after handling.

**Static Hazard:** Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures.

**Container Warnings:** Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, 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. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

### 7.2 Conditions for safe storage, including any incompatibilities

Not Applicable

### 7.3 Specific end use(s): Compressor Oil

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances. Refer to appropriate CEN standards.

### 8.1 Control parameters

No applicable occupational exposure limits exist for this material or its components. Consult local authorities for appropriate values.

### 8.2 Exposure controls

#### ENGINEERING CONTROLS:

Use in a well-ventilated area.

### PERSONAL PROTECTIVE EQUIPMENT

**Eye/Face Protection:** No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

**Skin Protection:** No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: Neoprene, Nitrile Rubber.

**Respiratory Protection:** No respiratory protection is normally required. Niosh approved air supplied pressure demand respirator. If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge.

### ENVIRONMENTAL EXPOSURE CONTROLS:

See relevant Community environmental protection legislation or the Annex, as applicable.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Attention: the data below are typical values and do not constitute a specification.**

### 9.1 Information on basic physical and chemical properties

#### Appearance

**Color:** Colorless

**Physical State:** Liquid

**Odor:** Hydrocarbon odor

**Odor Threshold:** No data available

**pH:** Not Applicable

**Melting Point:** No data available  
**Freezing Point:** Not Applicable  
**Initial Boiling Point:** >260°C (500°F)  
**Flashpoint:** (Cleveland Open Cup) > 220 °C (> 428 °F)  
**Evaporation Rate:** No data available **Flammability**  
**(solid, gas):** No Data Available **Flammability**  
**(Explosive) Limits (% by volume in air):**  
Lower: Not Applicable Upper: Not Applicable  
**Vapor Pressure:** <0.01 mmHg @ 37.8 °C (100 °F)  
**Vapor Density (Air = 1):** >1  
**Density:** 0.84 kg/l @ 15°C (59°F) (Typical)  
**Solubility:** Soluble in hydrocarbons; insoluble in water  
**Partition coefficient: n-octanol/water:** No data available  
**Auto-ignition temperature:** No data available  
**Decomposition temperature:** No data available  
**Viscosity:** >43 mm<sup>2</sup>/s @ 40°C (104°F)  
**Explosive Properties:** No Data Available  
**Oxidising properties:** No Data Available

**9.2 Other Information:** No Data Available

## SECTION 10 STABILITY AND REACTIVITY

**10.1 Reactivity:** May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

**10.2 Chemical Stability:** This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**10.3 Possibility of hazardous reactions:** Hazardous polymerization will not occur.

**10.4 Conditions to Avoid:** Not applicable

**10.5 Incompatible materials to avoid:** Not applicable

**10.6 Hazardous decomposition products:** None known (None expected)

## SECTION 11 TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Serious Eye Damage/Irritation:** The eye irritation hazard is based on evaluation of data for product components.

**Skin Corrosion/Irritation:** The skin irritation hazard is based on evaluation of data for similar materials or product components.

**Skin Sensitization:** The skin sensitization hazard is based on evaluation of data for similar materials or product components.

**Acute Dermal Toxicity:** The acute dermal toxicity hazard is based on evaluation of data for similar materials or product components.

**Acute Oral Toxicity:** The acute oral toxicity hazard is based on evaluation of data for similar materials or product components.

**Acute Toxicity Estimate (oral):** Not Applicable

**Acute Inhalation Toxicity:** The acute inhalation toxicity hazard is based on evaluation of data for product

components.

**Germ Cell Mutagenicity:** The hazard evaluation is based on data for components or a similar material.

**Carcinogenicity:** The hazard evaluation is based on data for components or a similar material.

**Reproductive Toxicity:** The hazard evaluation is based on data for components or a similar material.

**Specific Target Organ Toxicity - Single Exposure:** The hazard evaluation is based on data for components or a similar material.

**Specific Target Organ Toxicity - Repeated Exposure:** The hazard evaluation is based on data for components or a similar material.

**Aspiration Toxicity:** No data available

## SECTION 12 ECOLOGICAL INFORMATION

### 12.1 Toxicity

This material is not expected to be harmful to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

### 12.2 Persistence and degradability

This material is not expected to be readily biodegradable. The product has not been tested. The statement has been derived from the properties of the individual components.

### 12.3 Bioaccumulative potential Bioconcentration

Factor: No Data Available Octanol/Water Partition

Coefficient: No data available

### 12.4 Mobility in soil

No data available.

### 12.5 Results of PBT and vPvB assessment

This product is not, or does not contain, a substance that is a potential PBT or a vPvB.

### 12.6 Other adverse effects

No other adverse effects identified.

## SECTION 13 DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

In accordance with European Waste Catalogue (E.W.C.) the codification is the following: 13 02 06

## SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult appropriate Dangerous Goods Regulations for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

#### **ADR/RID**

NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT

- 14.1 **UN number:** Not applicable
- 14.2 **UN proper shipping name:** Not applicable
- 14.3 **Transport hazard class(es):** Not applicable
- 14.4 **Packing group:** Not applicable
- 14.5 **Environmental hazards:** Not applicable
- 14.6 **Special precautions for user:** Not applicable

#### **ICAO**

NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT

- 14.1 **UN number:** Not applicable
- 14.2 **UN proper shipping name:** Not applicable
- 14.3 **Transport hazard class(es):** Not applicable
- 14.4 **Packing group:** Not applicable
- 14.5 **Environmental hazards:** Not applicable
- 14.6 **Special precautions for user:** Not applicable

#### **IMO**

NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT

- 14.1 **UN number:** Not applicable
- 14.2 **UN proper shipping name:** Not applicable
- 14.3 **Transport hazard class(es):** Not applicable
- 14.4 **Packing group:** Not applicable
- 14.5 **Environmental hazards:** Not applicable
- 14.6 **Special precautions for user:** Not applicable
- 14.7 **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:** Not applicable

### **SECTION 15 REGULATORY INFORMATION**

#### **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture REGULATORY LISTS SEARCHED:**

- 01=EU. Directive 76/769/EEC: Restrictions on the marketing and use of certain dangerous substances.
- 02=EU Directive 90/394/EEC: Carcinogens at work.
- 03=EU Directive 92/85/EEC: Pregnant or breastfeeding workers.
- 04=EU Directive 96/82/EC (Seveso II): Article 9.
- 05=EU Directive 96/82/EC (Seveso II): Articles 6 and 7.
- 06=EU Directive 98/24/EC: Chemical agents at work.
- 07=EU Directive 2004/37/EC: On the protection of workers.
- 08=EU Regulation EC No. 689/2008: Annex 1, Part 1.
- 09=EU Regulation EC No. 689/2008: Annex 1, Part 2.
- 10=EU Regulation EC No. 689/2008: Annex 1, Part 3.
- 11=EU Regulation EC No. 850/2004: Prohibiting and restricting persistent organic pollutants (POPs).
- 12=EU REACH, Annex XVII: Restrictions on manufacture, placing on the market and use of certain dangerous

substances, mixture & article.

13=EU REACH, Annex XIV: Candidate List of Substances of Very High Concern for Authorization (SVHC).

The following components of this material are found on the regulatory lists indicated.

1,2-Benzenedicarboxylic acid, di-C9-11-branched 01

alkyl esters, C10-rich

#### **CHEMICAL INVENTORIES:**

All components comply with the following chemical inventory requirements: AICS (Australia), DSL (Canada), EINECS (European Union), ENCS (Japan), IECSC (China), KECI (Korea), PICCS (Philippines), TSCA (United States).

#### **15.2 Chemical safety assessment**

No chemical safety assessment.

### **SECTION 16 OTHER INFORMATION**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### **· Department issuing MSDS:**

AEGEAN OIL SA: Technical Department

#### **· Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

**No Annex**