

# SAFETY DATA SHEET

#### SECTION 1

# PRODUCT AND COMPANY IDENTIFICATION

As of the revision date above, this (M)SDS meets the regulations in United Arab Emirates.

#### PRODUCT

Product Name:HYJET IV-A PLUSProduct Description:Synthetic Base Stocks and AdditivesProduct Code:201550303010, 407972, 430314-60Intended Use:Aviation hydraulic fluid

# COMPANY IDENTIFICATION

Supplier:

EXXONMOBIL 407, EMARAT ATRIUM SHEIKH ZAYED ROAD P.O. BOX 33369 DUBAI United Arab Emirates

#### Product Technical Information

+20 2 795 4850 (ARABIC, ENGLISH, FRENCH)

 National Poison Centre:
 BAHRAIN +973 1787 5176 / LEBANON +961 1 6140 01 OR 2 OR 3 OR 6 / KUWAIT

 +965 246 8537 OR 241 8165 / UAE +971 2 4048 538 OR 540 OR 541

**SECTION 2** 

# HAZARDS IDENTIFICATION

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

# **CLASSIFICATION OF SUBSTANCE OR MIXTURE:**

Acute oral toxicant: Category 4. Eye irritation: Category 2. Carcinogen: Category 2. Reproductive toxicant (developmental): Category 2. Reproductive toxicant (fertility): Category 2. Specific target organ toxicant (repeated exposure): Category 2. Chronic aquatic toxicant: Category 1.

LABEL ELEMENTS:

**Pictograms:** 







# Signal Word: Warning

#### Hazard Statements:

Health:

H302: Harmful if swallowed.

H319: Causes serious eye irritation.

H351: Suspected of causing cancer.

- H361fd: Suspected of damaging fertility. Suspected of damaging the unborn child.
- H373: May cause damage to organs through prolonged or repeated exposure. (Adrenal, Liver). Environment:

H410: Very toxic to aquatic life with long lasting effects.

Supplemental:

EUH208: Contains: CALCIUM SULFONATE May produce an allergic reaction.

#### **Precautionary Statements:**

#### Prevention:

- P201: Obtain special instructions before use.
- P202: Do not handle until all safety precautions have been read and understood.
- P260: Do not breathe mist / vapours.
- P264: Wash skin thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.
- P273: Avoid release to the environment.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.

#### Response:

P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

- P308 + P313: IF exposed or concerned: Get medical advice/ attention.
- P314: Get medical advice/attention if you feel unwell.
- P330: Rinse mouth.
- P337 + P313: If eye irritation persists: Get medical advice/attention.
- P391: Collect spillage.

#### Storage:

P405: Store locked up.

#### Disposal:

P501: Dispose of contents and container in accordance with local regulations.

**Contains:** PHENOL, ISOPROPYLATED, PHOSPHATE (3:1) [TRIPHENYL PHOSPHATE > 5%]; TRIBUTYL PHOSPHATE

# Other hazard information:

# Physical / Chemical Hazards:

No significant hazards.

# Health Hazards:

# **Ex on Mobil**

Product Name: HYJET IV-A PLUS Revision Date: 18 Jan 2023 Page 3 of 11

High-pressure injection under skin may cause serious damage.

#### **Environmental Hazards:**

No additional hazards.

**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 3 COMPOSITION / INFORMATION ON INGREDIENTS

This material is defined as a mixture.

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

Name	CAS#	Concentration*	GHS Hazard Codes
2,6-DI-TERT-BUTYL-P-CRESOL	128-37-0	0.1 - < 1%	H400(M factor 1), H410(M factor 1)
NAPHTHALENESULFONIC ACID, DINONYL-, CALCIUM SALT	57855-77-3	0.1 - < 1%	H315, H319(2A), H317
PHENOL, ISOPROPYLATED, PHOSPHATE (3:1) [TRIPHENYL PHOSPHATE > 5%]	68937-41-7	10 - < 20%	H361(D), H361(F), H373, H401, H410(M factor 10)
TRIBUTYL PHOSPHATE	126-73-8	70 - < 80%	H302, H351, H315, H402, H412

\* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

**SECTION 4** 

FIRST AID MEASURES

# INHALATION

Immediately remove from further exposure. Get immediate medical assistance. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. Give supplemental oxygen, if available. If breathing has stopped, assist ventilation with a mechanical device.

# SKIN CONTACT

Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. 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 for at least 15 minutes. Get medical assistance.

# INGESTION

Seek immediate medical attention. Do not induce vomiting.

# NOTE TO PHYSICIAN

None



Product Name: HYJET IV-A PLUS Revision Date: 18 Jan 2023 Page 4 of 11

#### 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**

**SECTION 5** 

**Fire Fighting Instructions:** Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters 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.

**Unusual Fire Hazards:** May generate irritating and harmful gases/vapors/fumes when burning. Pressurized mists may form a flammable mixture. Hazardous material. Firefighters should consider protective equipment indicated in Section 8.

**Hazardous Combustion Products:** Aldehydes, Incomplete combustion products, Nitrogen oxides, Phosphorus oxides, Smoke, Fume, Sulfur oxides

#### FLAMMABILITY PROPERTIES

Flash Point [Method]: >160°C(320°F)[ASTM D-92]Flammable Limits (Approximate volume % in air):LEL:N/DUEL:N/DAutoignition Temperature:>400°C(752°F)UEL:N/D

#### **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.

#### **PROTECTIVE MEASURES**

Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required due to toxicity or flammability of the material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

#### SPILL MANAGEMENT

Land Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do it without risk. Ventilate the area. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Recover by pumping or with suitable absorbent.

**Water Spill:** Stop leak if you can do it without risk. Material will sink. Remove material, as much as possible, using mechanical equipment.

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



Product Name: HYJET IV-A PLUS Revision Date: 18 Jan 2023 Page 5 of 11

consulted. Note: Local regulations may prescribe or limit action to be taken.

# **ENVIRONMENTAL PRECAUTIONS**

Large Spills: Dike 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

Avoid all personal contact. Avoid vapors from heated materials to prevent exposure to potentially toxic/irritating fumes. Prevent small spills and leakage to avoid slip hazard.

Static Accumulator: This material is not 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 /	Standard		Note	Source
2,6-DI-TERT-BUTYL-P-CRESOL	Inhalable fraction and vapor	TWA	2 mg/m3			Abu Dhabi TLVs
2,6-DI-TERT-BUTYL-P-CRESOL		TWA	10 mg/m3			GCC TLVs
2,6-DI-TERT-BUTYL-P-CRESOL		TWA	10 mg/m3			UAE OELs
2,6-DI-TERT-BUTYL-P-CRESOL		TWA	10 mg/m3			Bahrain TLVs
2,6-DI-TERT-BUTYL-P-CRESOL	Inhalable fraction and vapor	TWA	2 mg/m3			ACGIH
TRIBUTYL PHOSPHATE		TWA	2.2 mg/m3	0.2 ppm		Abu Dhabi TLVs
TRIBUTYL PHOSPHATE		TWA	2.2 mg/m3	0.2 ppm		UAE OELs
TRIBUTYL PHOSPHATE		TWA	2.2 mg/m3	0.2 ppm		GCC TLVs
TRIBUTYL PHOSPHATE		TWA	2.2 mg/m3	0.2 ppm		Bahrain TLVs
TRIBUTYL PHOSPHATE	Inhalable fraction and vapor	TWA	5 mg/m3			ACGIH

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



# ENGINEERING CONTROLS

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

Adequate ventilation should be provided so that exposure limits are not exceeded.

# 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 protection is ordinarily required under normal 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/vapor 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. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style gloves.

Eye Protection: Chemical goggles 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: Chemical / oil resistant clothing if contact with material is likely.

**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**

Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

# **SECTION 9**

#### PHYSICAL AND CHEMICAL PROPERTIES

Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.



Product Name: HYJET IV-A PLUS Revision Date: 18 Jan 2023 Page 7 of 11

# GENERAL INFORMATION

Physical State:LiquidForm:ClearColor:VioletOdor:SweetOdor Threshold:N/D

# IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density (at 15 °C): 1.001 Flammability (Solid, Gas): N/A Flash Point [Method]: >160°C (320°F) [ASTM D-92] Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D >400°C (752°F) Autoignition Temperature: **Boiling Point / Range:** 288°C (550°F) [Estimated] Decomposition Temperature: N/D Vapor Density (Air = 1): N/D Vapor Pressure: < 0.001 kPa (0.01 mm Hg) at 20 °C | 0.067 kPa (0.5 mm Hg) at 200°F [Estimated] Evaporation Rate (n-butyl acetate = 1): N/D pH: N/D Log Pow (n-Octanol/Water Partition Coefficient): N/D Solubility in Water: Negligible Viscosity: 10.1 cSt (10.1 mm2/sec) at 40 °C | 3.5 cSt (3.5 mm2/sec) at 100°C Oxidizing Properties: See Hazards Identification Section.

# **OTHER INFORMATION**

Freezing Point:N/DMelting Point:N/DPour Point:< -62°C (-80°F)</th>

# **SECTION 10**

# STABILITY AND REACTIVITY

STABILITY: Material is stable under normal conditions.

**CONDITIONS TO AVOID:** Excessive heat.

MATERIALS TO AVOID: Strong oxidizers

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

**POSSIBILITY OF HAZARDOUS REACTIONS:** Hazardous polymerization will not occur.

SECTION 11

TOXICOLOGICAL INFORMATION

#### ACUTE TOXICITY

Route of Exposure	Conclusion / Remarks	
Inhalation		
Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.	
Irritation: No end point data for material.	Elevated temperatures or mechanical action may form vapors,	
	mist, or fumes which may be irritating to the eyes, nose, throat, or	
	lungs.	



Product Name: HYJET IV-A PLUS Revision Date: 18 Jan 2023 Page 8 of 11

INGESTION	
Toxicity (Rat): LD50 1671 mg/kg	Slightly toxic. Based on test data for the material.
Skin	
Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.
Irritation (Rabbit): Data available.	Negligible irritation to skin at ambient temperatures. Based on test data for the material.
Еуе	
Irritation (Rabbit): Data available.	Irritating and will injure eye tissue. Based on test data for structurally similar materials.

#### OTHER HEALTH EFFECTS FROM SHORT AND LONG TERM EXPOSURE

Anticipated health effects from sub-chronic, chronic, respiratory or skin sensitization, mutagenicity, reproductive toxicity, carcinogenicity, target organ toxicity (single exposure or repeated exposure), aspiration toxicity and other effects based on human experience and/or experimental data.

#### For the product itself:

Component concentrations in this formulation would not be expected to cause skin sensitization, based on tests of the components, this formulation, or similar formulations.

#### **Contains:**

An ingredient or ingredients that are classified as toxic to a specific target organ from a repeated exposure. Tributyl phosphate (TBP): Studies in rats have shown an increased incidence of urinary bladder tumors following long-term feeding of TBP in the diet. No bladder tumors were observed in similar studies in mice. The relevance of these findings for humans is uncertain.

Isopropylphenyl phosphate (iPP). Reproductive / developmental toxicity screening studies in rats of products containing high concentrations of iPP adversely affected male and female reproductive performance with significant reductions in fertility and conception indices. Number of rat pups born and live litter size were decreased in groups exposed to the iPP-containing products, while pup mortality was increased.

# **SECTION 12**

#### **ECOLOGICAL INFORMATION**

The information given is based on data for the material, components of the material, or for similar materials, through the application of bridging principals.

#### ECOTOXICITY

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

Material -- Expected to be harmful to aquatic organisms.

# **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**

Dispose of waste at an appropriate treatment & disposal facility in accordance with applicable laws and



Product Name: HYJET IV-A PLUS Revision Date: 18 Jan 2023 Page 9 of 11

regulations, and product characteristics at time of disposal. Protect the environment. Dispose of used oil at designated sites. Minimize skin contact. Do not mix used oils with solvents, brake fluids or coolants. Product is suitable for burning in an enclosed, controlled burner for fuel value or disposal by supervised incineration.

**Empty Container Warning** Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. 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.

#### **SECTION 14**

# **TRANSPORT INFORMATION**

LAND (ADR/RID)

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PHENOL, ISOPROPYLATED, PHOSPHATE (3:1) [TRIPHENYL PHOSPHATE > 5%]) Hazard Class: 9 Classification Code: M6 UN Number: 3082 Packing Group: III

Label(s) / Mark(s): 9, EHS Hazard ID Number: 90 Hazchem EAC: 3Z

# SEA (IMDG)

**Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PHENOL, ISOPROPYLATED, PHOSPHATE (3:1) [TRIPHENYL PHOSPHATE > 5%]) Hazard Class & Division: 9 EMS Number: F-A. S-F UN Number: 3082 Packing Group: Ш Marine Pollutant: Yes Label(s): q Transport Document Name: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PHENOL, ISOPROPYLATED, PHOSPHATE (3:1) [TRIPHENYL PHOSPHATE > 5%]), 9, PG III

Footnote: Not subject to the provisions of UN3082 Environmentally hazardous substances liquid, n.o.s., if shipped in quantities of 5 liters or less per single or inner combination packaging as per IMDG code 2.10.2.7.

# AIR (IATA)

 Proper Shipping Name:
 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PHENOL, ISOPROPYLATED, PHOSPHATE (3:1) [TRIPHENYL PHOSPHATE > 5%])

 Hazard Class & Division:
 9

 UN Number:
 3082

 Packing Group:
 III

 Label(s) / Mark(s):
 9, EHS

 Transport Document Name:
 UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (PHENOL, ISOPROPYLATED, PHOSPHATE (3:1) [TRIPHENYL PHOSPHATE > 5%]), 9, PG III

[Footnote: Not subject to the provisions of UN3082 Environmentally hazardous substances liquid, n.o.s., if



Product Name: HYJET IV-A PLUS Revision Date: 18 Jan 2023 Page 10 of 11

shipped in quantities of 5 liters or less per single or inner combination packaging as per Special Provision A197.]

#### SECTION 15 REGULATORY INFORMATION

This material is considered hazardous according to the Classification of Chemicals based on Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

# **REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS**

Listed or exempt from listing/notification on the following chemical inventories : AlIC, DSL, IECSC, ISHL, TCSI, TSCA

Special Cases:

Inventory	Status
KECI	Restrictions Apply
PICCS	Restrictions Apply

# **SECTION 16**

# OTHER INFORMATION

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

KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only):

H302: Harmful if swallowed; Acute Tox Oral, Cat 4

H315: Causes skin irritation; Skin Corr/Irritation, Cat 2

H317: May cause allergic skin reaction; Skin Sensitization, Cat 1

H319(2A): Causes serious eye irritation; Serious Eye Damage/Irr, Cat 2A

H351: Suspected of causing cancer; GHS Carcinogenicity, Cat 2

H361: Suspected of damaging fertility or the unborn child.; Repro Tox, Cat 2

H361(D): Suspected of damaging the unborn child; Repro Tox, Cat 2 (Develop)

H361(F): Suspected of damaging fertility; Repro Tox, Cat 2 (Fertility)

H373: May cause damage to organs through prolonged or repeated exposure; Target Organ, Repeated, Cat 2

H400: Very toxic to aquatic life; Acute Env Tox, Cat 1

H401: Toxic to aquatic life; Acute Env Tox, Cat 2

H402: Harmful to aquatic life; Acute Env Tox, Cat 3

H410: Very toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 1

H412: Harmful to aquatic life with long lasting effects; Chronic Env Tox, Cat 3

# THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

Composition: No components information was modified. Section 15: National Chemical Inventory Listing information was modified. Section 15: Special Cases Table information was modified.

The information and recommendations contained herein are, to the best of ExxonMobil's knowledge and belief, accurate and reliable as of the date issued. You can contact ExxonMobil to insure that this document is the most current available from ExxonMobil. The information and recommendations are offered for the user's consideration and examination. It is the user's responsibility to satisfy itself that the product is suitable for the intended use. If buyer repackages this product, it is the user's responsibility to insure proper health, safety and other necessary information is included with and/or on the container. Appropriate warnings and safe-handling procedures should be provided to



Product Name: HYJET IV-A PLUS Revision Date: 18 Jan 2023 Page 11 of 11

handlers and users. Alteration of this document is strictly prohibited. Except to the extent required by law, republication or retransmission of this document, in whole or in part, is not permitted. The term, "ExxonMobil" is used for convenience, and may include any one or more of ExxonMobil Chemical Company, Exxon Mobil Corporation, or any affiliates in which they directly or indirectly hold any interest.

Internal Use Only MHC: 1, 0, 0, 2, 0, 1

PPEC: D

\_\_\_\_\_

DGN: 2027171XAE (552690)