

Product Name: HYJET IV-A PLUS
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SAFETY DATA SHEET

SECTION 1	IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING
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As of the revision date above, this SDS meets the regulations in the United Kingdom & Ireland.

1.1. PRODUCT IDENTIFIER

Product Name: HYJET IV-A PLUS
Product Description: Synthetic Base Stocks and Additives
Product Code: 201550303010, 407972, 430314-60

1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Intended Use: Aviation hydraulic fluid

Uses advised against: This product is not recommended for any industrial, professional or consumer use other than the Identified Uses above.

1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Supplier: ExxonMobil Petroleum & Chemical BVBA
POLDERDIJKWEG
B-2030 Antwerpen
Belgium

Supplied by:
Sil-Mid Limited
Roman Park, Roman Way
Coleshill, West Midlands
B46 1HG. UK
T: 01675 432850
E: info@silmid.com

Emergency Telephone No. +44 (0)1675 432850
(Monday to Friday, 08:00 – 17:30 – GMT)

Product Technical Information:
SDS Internet Address:
E-Mail:
Supplier / Registrant:

(UK) 0800 028 2851 / (IE) 1800 882 024
www.msds.exxonmobil.com
sds.uk@exxonmobil.com
(BE) +32 3 543 3111

1.4. EMERGENCY TELEPHONE NUMBER

24 Hour Emergency Telephone:

(UK) (+44) 870 8200418 / (IE) (+353) 19014670
(CHEMTREC)

National Poison Control Centre:

(UK) 111 / (IE) (+353)1 809 2166

SECTION 2	HAZARDS IDENTIFICATION
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2.1. CLASSIFICATION OF SUBSTANCE OR MIXTURE

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Classification according to Regulation (EC) No 1272/2008

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 2.

H302: Harmful if swallowed. H319: Causes serious eye irritation. H351: Suspected of causing cancer. H361: Suspected of damaging fertility or the unborn child. H373: May cause damage to organs through prolonged or repeated exposure. Liver, Adrenal

H411: Toxic to aquatic life with long lasting effects.

2.2. LABEL ELEMENTS

Label elements according to Regulation (EC) No 1272/2008

Pictograms:



Signal Word: Warning

Hazard Statements:

H302: Harmful if swallowed. H319: Causes serious eye irritation. H351: Suspected of causing cancer. H361: Suspected of damaging fertility or the unborn child. H373: May cause damage to organs through prolonged or repeated exposure. Liver, Adrenal

H411: Toxic to aquatic life with long lasting effects.

Precautionary Statements:

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.

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.

P405: Store locked up.

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

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

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Contains: CALCIUM SULPHONATE May produce an allergic reaction.

2.3. OTHER HAZARDS

Physical / Chemical Hazards:
 No significant hazards.

Health Hazards:
 High-pressure injection under skin may cause serious damage.

Environmental Hazards:
 No additional hazards. Material does not meet the criteria for PBT or vPvB in accordance with REACH Annex XIII.

SECTION 3	COMPOSITION / INFORMATION ON INGREDIENTS
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3.1. SUBSTANCES Not Applicable. This material is regulated as a mixture.

3.2. MIXTURES

This material is defined as a mixture.

Reportable hazardous substance(s) complying with the classification criteria and/or with an exposure limit (OEL)

Name	CAS#	EC#	Registration#	Concentration *	GHS/CLP classification
2,6-DI-TERT-BUTYL-P-CRESOL	128-37-0	204-881-4	01-2119565113-46	0.1 - < 1%	Aquatic Acute 1 H400 (M factor 1), Aquatic Chronic 1 H410 (M factor 1)
CALCIUM BIS(DI C8-C10, BRANCHED, C9 RICH, ALKYLNAPHTHALENESULPHONATE)	57855-77-3	939-717-7	01-2119980985-16	0.1 - < 1%	Skin Irrit. 2 H315, Eye Irrit. 2 H319, Skin Sens. 1 H317
PHENOL, ISOPROPYLATED, PHOSPHATE (3:1) [TRIPHENYL PHOSPHATE > 5%]	68937-41-7	273-066-3	01-2119535109-41	10 - < 20%	[Aquatic Acute 2 H401], Aquatic Chronic 1 H410 (M factor 1), Repr. 2 H361d, Repr. 2 H361f, STOT RE 2 H373
TRIBUTYL PHOSPHATE	126-73-8	204-800-2	01-2119492859-14	70 - < 80%	[Aquatic Acute 3 H402], Aquatic Chronic 3 H412, Acute Tox. 4 H302, Carc. 2 H351, Skin Irrit. 2 H315

Note - any classification in brackets is a GHS building block that was not adopted by the EU in the CLP regulation (No 1272/2008) and therefore is not applicable in the EU or in non-EU countries which have implemented the CLP regulation and is shown for informational purposes only.

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

Note: See SDS Section 16 for full text of hazard statements.

SECTION 4 FIRST AID MEASURES

4.1. DESCRIPTION OF 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.

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Eye pain, redness, tearing, swelling of eyelids, itching. Local necrosis as evidenced by delayed onset of pain and tissue damage a few hours after injection.

4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

The need to have special means for providing specific and immediate medical treatment available in the workplace is not expected.

SECTION 5 FIRE FIGHTING MEASURES

5.1. EXTINGUISHING MEDIA

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

Unsuitable Extinguishing Media: Straight streams of water

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

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

5.3. ADVICE FOR FIRE FIGHTERS

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.

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

FLAMMABILITY PROPERTIES

Flash Point [Method]: >160°C (320°F) [ASTM D-92]

Upper/Lower Flammable Limits (Approximate volume % in air): UEL: No data available LEL: No data available

Autoignition Temperature: >400°C (752°F) [test method unavailable]

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

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.

6.2. ENVIRONMENTAL PRECAUTIONS

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

6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Land Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so 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 so 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 consulted. Note: Local regulations may prescribe or limit action to be taken.

6.4. REFERENCES TO OTHER SECTIONS

See Sections 8 and 13.

SECTION 7 HANDLING AND STORAGE

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7.1. PRECAUTIONS FOR SAFE HANDLING

Avoid all personal contact. Avoid vapour 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.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Do not store in open or unlabelled containers.

7.3. SPECIFIC END USES

Section 1 informs about identified end-uses. No industrial or sector specific guidance available.

SECTION 8	EXPOSURE CONTROLS / PERSONAL PROTECTION
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8.1. CONTROL PARAMETERS

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		TWA	10 mg/m ³		UK EH40
2,6-DI-TERT-BUTYL-P-CRESOL	Inhalable fraction and vapour	TWA	2 mg/m ³		ACGIH
TRIBUTYL PHOSPHATE		STEL	5 mg/m ³		UK EH40
TRIBUTYL PHOSPHATE		TWA	5 mg/m ³		UK EH40
TRIBUTYL PHOSPHATE	Inhalable fraction and vapour	TWA	5 mg/m ³		ACGIH

UK EH40 Workplace Exposure Limits. Exposure limits for use with Control of Substances Hazardous to Health Regulations 2002 (as amended)

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

UK Health and Safety Executive (HSE)

8.2. EXPOSURE CONTROLS

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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/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. 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. Nitrile, minimum 0.38 mm thickness or comparable protective barrier material with a high performance level for continuous contact use conditions, permeation breakthrough minimum 480 minutes in accordance with CEN standards EN 420 and EN 374.

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.

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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.

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid
Form: Clear
Colour: Violet
Odour: Sweet
Odour Threshold: No data available
pH: No data available
Melting Point: No data available
Freezing Point: No data available
Initial Boiling Point / and Boiling Range: 288°C (550°F) [Estimated]
Flash Point [Method]: >160°C (320°F) [ASTM D-92]
Evaporation Rate (n-butyl acetate = 1): No data available
Flammability (Solid, Gas): Not technically feasible
Upper/Lower Flammable Limits (Approximate volume % in air): UEL: No data available LEL: No data available
Vapour Pressure: < 0.001 kPa (0.01 mm Hg) at 20 °C | 0.067 kPa (0.5 mm Hg) at 200°F [Estimated]
Vapour Density (Air = 1): No data available
Relative Density (at 15 °C): 1.001 [test method unavailable]
Solubility(ies): water Negligible
Partition coefficient (n-Octanol/Water Partition Coefficient): No data available
Autoignition Temperature: >400°C (752°F) [test method unavailable]
Decomposition Temperature: No data available
Viscosity: 10.1 cSt (10.1 mm²/sec) at 40°C | 3.5 cSt (3.5 mm²/sec) at 100°C [test method unavailable]
Explosive Properties: None
Oxidizing Properties: None

9.2. OTHER INFORMATION

Pour Point: < -62°C (-80°F) [test method unavailable]

SECTION 10 STABILITY AND REACTIVITY

10.1. REACTIVITY: See sub-sections below.

10.2. CHEMICAL STABILITY: Material is stable under normal conditions.

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

10.4. CONDITIONS TO AVOID: Excessive heat.

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10.5. INCOMPATIBLE MATERIALS: Strong oxidisers

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

SECTION 11	TOXICOLOGICAL INFORMATION
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11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

Hazard Class	Conclusion / Remarks
Inhalation	
Acute 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 vapours, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs.
Ingestion	
Acute Toxicity (Rat): LD 50 1671 mg/kg	Slightly Toxic. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 401
Skin	
Acute Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.
Skin Corrosion/Irritation (Rabbit): Data available. Test scores or other study results do not meet criteria for classification.	Negligible irritation to skin at ambient temperatures. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 404
Eye	
Serious Eye Damage/Irritation (Rabbit): Data available. Test scores or other study results meet criteria for classification.	Irritating and will injure eye tissue. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 405
Sensitisation	
Respiratory Sensitization: No end point data for material.	Not expected to be a respiratory sensitizer.
Skin Sensitization: No end point data for material.	Not expected to be a skin sensitizer. Based on assessment of the components.
Aspiration: Data available.	Not expected to be an aspiration hazard. Based on physico-chemical properties of the material.
Germ Cell Mutagenicity: No end point data for material.	Not expected to be a germ cell mutagen. Based on assessment of the components.
Carcinogenicity: No end point data for material.	Caused cancer in laboratory animals, but the relevance to humans is uncertain. Based on assessment of the components.
Reproductive Toxicity: No end point data for material.	Caused damage to fertility in laboratory animals, but the relevance to humans is uncertain. Caused damage to the fetus in laboratory animals, but the relevance to humans is uncertain. Based on assessment of the components.
Lactation: No end point data for material.	Not expected to cause harm to breast-fed children.
Specific Target Organ Toxicity (STOT)	
Single Exposure: No end point data for material.	Not expected to cause organ damage from a single exposure.
Repeated Exposure: No end point data for material.	Concentrated, prolonged or deliberate exposure may cause organ damage. Based on assessment of the components.

TOXICITY FOR SUBSTANCES

NAME	ACUTE TOXICITY
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TRIBUTYL PHOSPHATE

Oral Lethality: LD 50 1552 mg/kg (Rat)
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OTHER INFORMATION

For the product itself:

Target Organs Repeated Exposure: Liver, Adrenal

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:

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.

12.1. TOXICITY

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

Material -- Expected to be harmful to aquatic organisms.

12.2. PERSISTENCE AND DEGRADABILITY Not determined.

12.3. BIOACCUMULATIVE POTENTIAL Not determined.

12.4. MOBILITY IN SOIL

Not determined.

12.5. PERSISTENCE, BIOACCUMULATION AND TOXICITY FOR SUBSTANCE(S)

Material does not meet the Reach Annex XIII criteria for PBT or vPvB.

12.6. OTHER ADVERSE EFFECTS

No adverse effects are expected.

SECTION 13	DISPOSAL CONSIDERATIONS
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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.

13.1. WASTE TREATMENT METHODS

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

European Waste Code: 13 01 11*

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 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
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LAND (ADR/RID)

14.1. UN Number: 3082
14.2. UN Proper Shipping Name (Technical Name): ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PHENOL, ISOPROPYLATED, PHOSPHATE (3:1) [TRIPHENYL PHOSPHATE > 5%])
14.3. Transport Hazard Class(es): 9
14.4. Packing Group: III
14.5. Environmental Hazards: Yes
14.6. Special Precautions for users:
Classification Code: M6
Label(s) / Mark(s): 9, EHS
Hazard ID Number: 90
Hazchem EAC: 3Z

INLAND WATERWAYS (ADN)

14.1. UN (or ID) Number: 3082
14.2. UN Proper Shipping Name (Technical Name): ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PHENOL, ISOPROPYLATED, PHOSPHATE (3:1) [TRIPHENYL PHOSPHATE > 5%])

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14.3. Transport Hazard Class(es): 9
14.4. Packing Group: III
14.5. Environmental Hazards: Yes
14.6. Special Precautions for users:
Hazard ID Number: 90
Label(s) / Mark(s): 9, EHS

SEA (IMDG)

14.1. UN Number: 3082
14.2. UN Proper Shipping Name (Technical Name): ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PHENOL, ISOPROPYLATED, PHOSPHATE (3:1) [TRIPHENYL PHOSPHATE > 5%])
14.3. Transport Hazard Class(es): 9
14.4. Packing Group: III
14.5. Environmental Hazards: Marine Pollutant
14.6. Special Precautions for users:
Label(s): 9
EMS Number: F-A, S-F
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.

SEA (MARPOL 73/78 Convention - Annex II):

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not classified according to Annex II

AIR (IATA)

14.1. UN Number: 3082
14.2. UN Proper Shipping Name (Technical Name): ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PHENOL, ISOPROPYLATED, PHOSPHATE (3:1) [TRIPHENYL PHOSPHATE > 5%])
14.3. Transport Hazard Class(es): 9
14.4. Packing Group: III
14.5. Environmental Hazards: Yes
14.6. Special Precautions for users:
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 shipped in quantities of 5 liters or less per single or inner combination packaging as per Special Provision A197.]

SECTION 15	REGULATORY INFORMATION
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REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS

Listed or exempt from listing/notification on the following chemical inventories (May contain substance(s) subject to notification to the EPA Active TSCA inventory prior to import to USA): AICS,

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DSL, IECSC, TSCA

Special Cases:

Inventory	Status
KECI	Restrictions Apply

15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

Applicable EU Directives and Regulations:

1907/2006 [... on the Registration, Evaluation, Authorisation and Restriction of Chemicals ... and amendments thereto]
 92/85/EEC [...pregnant workers...recently given birth or...breastfeeding directive]
 94/33/EC [...on the protection of young people at work]
 98/24/EC [... on the protection of workers from the risk related to chemical agents at work ...].
 Refer to Directive for details of requirements.
 1272/2008 [on classification, labelling and packaging of substances and mixtures.. and amendments thereto]

15.2. CHEMICAL SAFETY ASSESSMENT

REACH Information: A Chemical Safety Assessment has been carried out for one or more substances present in the material.

SECTION 16	OTHER INFORMATION
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REFERENCES: Sources of information used in preparing this SDS included one or more of the following: results from in house or supplier toxicology studies, CONCAWE Product Dossiers, publications from other trade associations, such as the EU Hydrocarbon Solvents REACH Consortium, U.S. HPV Program Robust Summaries, the EU IUCLID Data Base, U.S. NTP publications, and other sources, as appropriate.

List of abbreviations and acronyms that could be (but not necessarily are) used in this safety data sheet:

Acronym	Full text
N/A	Not applicable
N/D	Not determined
NE	Not established
VOC	Volatile Organic Compound
AICS	Australian Inventory of Chemical Substances
AIHA WEEL	American Industrial Hygiene Association Workplace Environmental Exposure Limits
ASTM	ASTM International, originally known as the American Society for Testing and Materials (ASTM)

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DSL	Domestic Substance List (Canada)
EINECS	European Inventory of Existing Commercial Substances
ELINCS	European List of Notified Chemical Substances
ENCS	Existing and new Chemical Substances (Japanese inventory)
IECSC	Inventory of Existing Chemical Substances in China
KECI	Korean Existing Chemicals Inventory
NDSL	Non-Domestic Substances List (Canada)
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances
TLV	Threshold Limit Value (American Conference of Governmental Industrial Hygienists)
TSCA	Toxic Substances Control Act (U.S. inventory)
UVCB	Substances of Unknown or Variable composition, Complex reaction products or Biological materials
LC	Lethal Concentration
LD	Lethal Dose
LL	Lethal Loading
EC	Effective Concentration
EL	Effective Loading
NOEC	No Observable Effect Concentration
NOELR	No Observable Effect Loading Rate

Classification according to Regulation (EC) No 1272/2008

Classification according to Regulation (EC) No 1272/2008	Classification procedure
Acute Tox. 4; H302	Based on test data
Aquatic Chronic 2; H411	Calculation
Carc. 2; H351	Calculation
Eye Irrit. 2; H319	Bridging, structurally similar materials
Repr. 2; H361d	Calculation
Repr. 2; H361f	Calculation
STOT RE 2; H373	Calculation

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

Acute Tox. 4 H302: Harmful if swallowed; Acute Tox Oral, Cat 4
 Skin Irrit. 2 H315: Causes skin irritation; Skin Corr/Irritation, Cat 2
 Skin Sens. 1 H317: May cause allergic skin reaction; Skin Sensitization, Cat 1
 Eye Irrit. 2 H319: Causes serious eye irritation; Serious Eye Damage/Irr, Cat 2
 Carc. 2 H351: Suspected of causing cancer; GHS Carcinogenicity, Cat 2
 Repr. 2 H361: Suspected of damaging fertility or the unborn child.; Repr Tox, Cat 2
 Repr. 2 H361d: Suspected of damaging the unborn child; Repr Tox, Cat 2 (Develop)
 Repr. 2 H361f: Suspected of damaging fertility; Repr Tox, Cat 2 (Fertility)
 STOT RE 2 H373: May cause damage to organs through prolonged or repeated exposure; Target Organ, Repeated, Cat 2
 Aquatic Acute 1 H400: Very toxic to aquatic life; Acute Env Tox, Cat 1
 [Aquatic Acute 2 H401]: Toxic to aquatic life; Acute Env Tox, Cat 2
 [Aquatic Acute 3 H402]: Harmful to aquatic life; Acute Env Tox, Cat 3
 Aquatic Chronic 1 H410: Very toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 1
 Aquatic Chronic 3 H412: Harmful to aquatic life with long lasting effects; Chronic Env Tox, Cat 3

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

Section 11: Eye Irritation Test Comment information was modified.
 Section 11: Eye Irritation Test Data information was modified.

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Revision Date: 25 Jul 2019

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Section 11: Eye Irritation Test Guideline information was added.

Section 16: Classification CLP/GHS Table information was modified.

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MHC: 1, 0, 0, 2, 0, 1

PPEC: D

DGN: 2027171XGB (552690)

ANNEX

Annex not required for this material.