



# SAFETY DATA SHEET

Gulf Harmony ZF HVI 46

10122/46/4

Issuing Date 01-30-2018

Revision Date 01-30-2018

Version 1

## SECTION 1: IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

### Product identifier

**Product Name** Gulf Harmony ZF HVI 46  
**Product Code(s)** 10122/46/4

### Other means of identification

**UN Number** Not Applicable

### Recommended use of the chemical and restrictions on use

**Recommended Use** Engine oil  
**Uses advised against** Any other purpose.

### Suppliers name, address and phone number

Gulf Oil Supply Company Limited  
B2 Industry Street, Qormi, QRM 3000, Malta  
+44 207 321 6219  
products@gulfoilltd.com sds@gulfoilltd.com

### Emergency telephone number

Europe (+) 44 808 189 0979 Code 334276  
(+) 1 760 476 3961 Code 334276  
(+) 32 (0) 3241 33 55

**Poison Information Center telephone number** (AU) 13 11 26, (NZ) 0800 764 766

## SECTION 2: HAZARDS IDENTIFICATION

### GHS Classification

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

### Label elements

**Signal word**  
None

**Hazard statements**  
None

**Precautionary Statements**

None

**Other hazards**

No information available

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

This product is a mixture. Health hazard information is based on its ingredients

Chemical name	CAS No	Weight-%
Highly refined base oil (Viscosity >20.5 cSt @40°C)	-	25% - 60%
Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)	-	25% - 60%

**Additional information**

Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

See Section 15 for additional information on base oils. The remaining composition is a mixture of non-classified ingredients or additives below the threshold for disclosure

**SECTION 4: FIRST AID MEASURES****Description of first-aid measures**

<b>General advice</b>	If symptoms persist, call a physician.
<b>Inhalation</b>	Move to fresh air.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use.
<b>Eye contact</b>	Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.
<b>Ingestion</b>	Clean mouth with water. Drink plenty of water. Do not induce vomiting without medical advice.
<b>Protection of First-aiders</b>	Use personal protective equipment.

**Most important symptoms and effects, both acute and delayed**

<b>Main Symptoms</b>	None
----------------------	------

**Indication of immediate medical attention and special treatment needed**

<b>Notes to physician</b>	Treat symptomatically.
---------------------------	------------------------

**SECTION 5: FIRE FIGHTING MEASURES****Extinguishing media****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.; Use CO2, dry chemical, or foam, Water spray or fog, Cool containers / tanks with water spray

**Extinguishing media which shall not be used for safety reasons**

Do not use a solid water stream as it may scatter and spread fire

**Specific hazards arising from the chemical**

Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). In the event of fire and/or explosion do not breathe fumes. This material creates a fire hazard because it floats on water. Combustible material.

**Hazardous decomposition products**

Incomplete combustion and thermolysis produces potentially toxic gases such as carbon monoxide and carbon dioxide

**Advice for firefighters****Special protective equipment for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

**SECTION 6: ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

Remove all sources of ignition. Ensure adequate ventilation.

**Advice for non-emergency personnel**                      Material can create slippery conditions.

**Advice for emergency responders**    For personal protection see section 8.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

**Methods and materials for containment and cleaning up**

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Dike to collect large liquid spills.

**Reference to other sections**

See Section 8/12/13 for additional information

**SECTION 7: HANDLING AND STORAGE****Precautions for safe handling**

Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities****Technical measures/Storage conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep container tightly closed in a dry and well-ventilated place.

**Incompatible materials**

Oxidizing agent

**Recommended Use**                                      Engine oil

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters****Exposure Limits**

Chemical name	Australia	New Zealand	New Zealand - Biological Exposure Indices (BEI)
Highly refined base oil (Viscosity >20.5 cSt @40°C)		TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	
Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)		TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	

Australia - Workplace Exposure Standards for Airborne Contaminants. New Zealand - Workplace Exposure Standards and Biological Exposure Indices.

### Appropriate engineering controls

**Engineering controls** Ensure adequate ventilation, especially in confined areas.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Safety glasses with side-shields.  
**Skin and body protection** Long sleeved clothing. Apron. Impervious gloves.  
**Hand Protection** Protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. Barrier creams may help to protect the exposed areas of skin, they should however not be applied once exposure has occurred.  
**Respiratory protection** No special protective equipment required. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

**Hygiene measures** Regular cleaning of equipment, work area and clothing is recommended.

**Environmental Exposure Controls** No special environmental precautions required.  
**Thermal hazards** None under normal use conditions

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	liquid	<b>Appearance</b>	clear amber
<b>Odor</b>	Hydrocarbon-like	<b>Odor threshold</b>	Not Determined
<u>Property</u>	<u>Values</u>	<u>Remarks</u>	
<b>pH</b>	Not Determined		
<b>Melting point / freezing point</b>	Not Determined		
<b>Boiling point / boiling range</b>	Not Determined		
<b>Flash point</b>	234 °C / 453 °F	ASTM D 92	
<b>Evaporation rate</b>	Not Determined		
<b>Flammability (solid, gas)</b>	Not Determined		
<b>Flammability Limit in Air</b>			
<b>Upper flammability limit:</b>	Not Determined		
<b>Lower flammability limit:</b>	Not Determined		
<b>Vapor pressure</b>	Not Determined		
<b>Vapor density</b>	Not Determined		
<b>Relative density</b>	0.8488	@15°C	
<b>Solubility(ies)</b>	Insoluble in water		
<b>Partition coefficient</b>	Not Determined		
<b>Autoignition temperature</b>	Not Determined		
<b>Decomposition temperature</b>	Not Determined		

<b>Kinematic viscosity</b>	53.4 cSt @ 40 °C	ASTM D 445
<b>Explosive properties</b>	Not applicable	
<b>Oxidizing Properties</b>	Not applicable	

**Other Information**

<b>Viscosity, kinematic (100°C)</b>	9.8 cSt @ 100°C	ASTM D 445
<b>Pour Point</b>	-39 °C / -38 °F	ASTM D 97
<b>VOC Content (ASTM E-1868-10)</b>	Not Determined	
<b>VOC content</b>	Not Determined	

## SECTION 10: STABILITY AND REACTIVITY

**Reactivity**

None under normal use conditions

**Chemical stability**

Stable under normal conditions

**Possibility of hazardous reactions**

None under normal use conditions

**Conditions to avoid**

Keep away from open flames, hot surfaces and sources of ignition, Extremes of temperature and direct sunlight

**Incompatible materials**

Oxidizing agent

**Hazardous decomposition products**

Incomplete combustion and thermolysis produces potentially toxic gases such as carbon monoxide and carbon dioxide.

## SECTION 11: TOXICOLOGICAL INFORMATION

**Information on the likely routes of exposure****Product Information - Principle Routes of Exposure**

<b>Inhalation</b>	None known
<b>Eye contact</b>	None known
<b>Skin contact</b>	None known
<b>Ingestion</b>	None known

**Numerical measures of toxicity - Product Information**

<b>ATEmix (oral)</b>	>2000 mg/kg
<b>ATEmix (dermal)</b>	>2000 mg/kg

**Acute toxicity - Product Information**

Product does not present an acute toxicity hazard based on known or supplied information.

**Acute toxicity - Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Highly refined base oil (Viscosity >20.5 cSt @40°C)	>2000 mg/kg	>2000 mg/kg	
Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)	>2000 mg/kg	>2000 mg/kg	

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met.
<b>Sensitization</b>	
<b>Respiratory Sensitization</b>	Based on available data, the classification criteria are not met.
<b>Skin sensitization</b>	Based on available data, the classification criteria are not met.
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ systemic toxicity (single exposure)</b>	Based on available data, the classification criteria are not met
<b>Specific target organ systemic toxicity (repeated exposure)</b>	Based on available data, the classification criteria are not met
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.
<b>Exposure levels</b>	See section 8 for more information
<b>Interactive effects</b>	None known

**SECTION 12: ECOLOGICAL INFORMATION****Toxicity**

No special environmental measures are necessary

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Highly refined base oil (Viscosity >20.5 cSt @40°C)	>100: 72 h mg/L	>100: 96 h mg/L		>100: 48 h mg/L
Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)	>100: 72 h mg/L	>100: 96 h mg/L		>100: 48 h mg/L

**Persistence and degradability**

The product is not readily biodegradable, but it can be degraded by micro-organisms, it is regarded as being inherently biodegradable.

**Bioaccumulative potential**

No information available

**Mobility**

The product is insoluble and floats on water

**Other adverse effects**

None known

**SECTION 13: DISPOSAL CONSIDERATIONS****Safe handling and disposal methods**

Dispose of in accordance with local regulations

**Disposal of any contaminated packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal. Observe all label precautions until container is cleaned, reconditioned or destroyed.

**Environmental regulations**

No information available

**SECTION 14: TRANSPORT INFORMATION**

**ADG** Not regulated

**IMDG** Not regulated

**IATA** Not regulated

**SECTION 15: REGULATORY INFORMATION****Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Australia**

Model Work Health and Safety Regulations (2016).  
Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (2011).

**Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)**

No poisons schedule number allocated

**New Zealand**

Hazardous Substances Regulation 2001.

**New Zealand**

**HSNO Approval Number:**

Not Regulated

**HSNO Hazard Classification:**

Not Regulated

Not Regulated

**International Regulations****Ozone-depleting substances (ODS)**

Not applicable

**Persistent Organic Pollutants**

Not applicable

**Chemicals Subject to Prior Informed Consent (PIC)**

Not applicable

**International Inventories**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
All ingredients are on the inventory or exempt from listing

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
All ingredients are on the inventory or exempt from listing

**AICS** - Australian Inventory of Chemical Substances  
All ingredients are on the inventory or exempt from listing

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
All ingredients are on the inventory or exempt from listing

**KECL** - Korean Existing and Evaluated Chemical Substances  
All ingredients are on the inventory or exempt from listing

**IECSC** - China Inventory of Existing Chemical Substances  
All ingredients are on the inventory or exempt from listing

**ENCS** - Japan Existing and New Chemical Substances  
All ingredients are on the inventory or exempt from listing

**TCSI** - Taiwan National Existing Chemical Inventory  
Contact supplier for inventory compliance status

**NZIoC** - New Zealand Inventory of Chemicals  
All ingredients are on the inventory or exempt from listing

**Other Information**

The highly refined base oil (Viscosity >20.5 cSt @40°C) contains one or more substance with the following CAS/EC numbers:

Chemical name	CAS No	EC-No
Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4	265-090-8
Distillates (petroleum), solvent-refined light paraffinic	64741-89-5	265-091-3
Residual oils (petroleum), solvent deasphalted	64741-95-3	265-096-0
Distillates (petroleum), solvent-refined heavy naphthenic	64741-96-4	265-097-6
Distillates (petroleum), solvent-refined light naphthenic	64741-97-5	265-098-1
Residual oils (petroleum), solvent-refined	64742-01-4	265-101-6
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	265-155-0
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	265-156-6
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	265-157-1
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	265-158-7



Distillates (petroleum), solvent-dewaxed light paraffinic	64742-56-9	265-159-2
Residual oils (petroleum), hydrotreated	64742-57-0	265-160-8
Lubricating oils (petroleum), hydrotreated spent	64742-58-1	265-161-3
Residual oils (petroleum), solvent-dewaxed	64742-62-7	265-166-0
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	265-169-7
Paraffin oils (petroleum), catalytic dewaxed heavy	64742-70-7	265-174-4
Paraffin oils (petroleum), catalytic dewaxed light	64742-71-8	265-176-5
Lubricating oils (petroleum), C>25, hydrotreated bright stock-based	72623-83-7	276-735-8
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, high-viscosity	72623-85-9	276-736-3
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0	276-737-9
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	276-738-4
Lubricating oils	74869-22-0	278-012-2
White mineral oil (petroleum)	8042-47-5	232-455-8

The highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C) contains one or more substance with the following CAS/EC numbers:

Chemical name	CAS No	EC-No
Distillates (petroleum), hydrotreated heavy paraffinic	63742-54-7	265-157-1
Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4	265-090-8
Distillates (petroleum), solvent-refined light paraffinic	64741-89-5	265-091-3
Residual oils (petroleum), solvent deasphalted	64741-95-3	265-096-0
Distillates (petroleum), solvent-refined heavy naphthenic	64741-96-4	265-097-6
Distillates (petroleum), solvent-refined light naphthenic	64741-97-5	265-098-1
Residual oils (petroleum), solvent-refined	64742-01-4	265-101-6
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	265-155-0
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	265-156-6
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	265-157-1
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	265-158-7
Distillates (petroleum), solvent-dewaxed light paraffinic	64742-56-9	265-159-2
Residual oils (petroleum), hydrotreated	64742-57-0	265-160-8
Lubricating oils (petroleum), hydrotreated spent	64742-58-1	265-161-3
Residual oils (petroleum), solvent-dewaxed	64742-62-7	265-166-0
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	265-169-7
Paraffin oils (petroleum), catalytic dewaxed light	64742-71-8	265-176-5
Dec-1-ene, homopolymer, hydrogenated	68037-01-4	500-183-1
Lubricating oils (petroleum), C>25, hydrotreated bright stock-based	72623-83-7	276-735-8
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, high-viscosity	72623-85-9	276-736-3
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0	276-737-9
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	276-738-4
Lubricating oils	74869-22-0	278-012-2

## SECTION 16: OTHER INFORMATION

Issuing Date	01-30-2018
Revision Date	01-30-2018
Revision Note	Initial Release

Key or legend to abbreviations and acronyms used in the safety data sheet

TWA	Time weighted average	STEL	Short term exposure limit
Ceiling	Maximum limit value:	(s) - Skin	Skin designation
+	Sensitizers	C	Carcinogen

STOT SE - Specific target organ systemic toxicity (Single exposure)  
STOT RE - Specific target organ systemic toxicity (repeated exposure)  
VOC - Volatile organic compounds

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of Safety Data Sheet**