Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 10/13/2017 Date of issue: 03/08/2016

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: World Oil[®] Multi-Purpose Advance Formula Heavy Duty Extended Life Premix 50/50 Antifreeze Product Code: DK600P

Version: 1.0

Synonyms: World Oil® Multi-Purpose Advance Formula Heavy Duty Extended Life Premix 50/50 Antifreeze

1.2. Intended Use of the Product

Use of the substance/mixture: Antifreeze/Coolant

1.3. Name, Address, and Telephone of the Responsible Party

Manufacturer

World Oil Corporation 2000 North Alameda Street Compton, CA 90222 US www.worldoilcorp.com

T: (310) 537-7100

1.4. Emergency Telephone Number

: 1-800-424-9300 (CHEMTREC)

Emergency Number : SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US classification

Acute Tox. 4 (Oral) H302 STOT RE 2 H373 Full text of hazard classes and H-statements : see section 16

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US) Hazard Statements (GHS-US)	 Warning H302 - Harmful if swallowed. H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).
Precautionary Statements (GHS-US)	 P260 - Do not breathe vapors, mist, or spray. P264 - Wash hands, forearms, and other exposed areas thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P301+P330+P312 - If swallowed: Rinse mouth. Call a poison center or doctor if you feel unwell. P314 - Get medical advice/attention if you feel unwell. P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	%	GHS-US classification
Ethylene glycol	(CAS No) 107-21-1	50 - 55	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Water	(CAS No) 7732-18-5	45 - 55	Not classified

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Diethylene glycol	(CAS No) 111-46-6	< 5	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Hydrated Inorganic and Organic Salts (Proprietary Formulation)	(CAS No) Proprietary	< 3	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 Aquatic Acute 3, H402 Aquatic Chronic 3, H412

Full text of H-phrases: see section 16

The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR 1910.1200]

SECTION 4: FIRST AID MEASURES

4.1. **Description of First Aid Measures**

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). If exposed or concerned: Get medical advice/attention.

First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.

First-aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water or soap and water for at least 15 minutes. Wash contaminated clothing before reuse. Obtain medical attention if irritation develops or persists.

First-aid Measures After Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Obtain medical attention if irritation persists.

First-aid Measures After Ingestion: Rinse mouth. Do not induce vomiting. Get medical advice and attention if you feel unwell. 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: Harmful if swallowed. May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

Symptoms/Injuries After Inhalation: May cause respiratory irritation.

Symptoms/Injuries After Skin Contact: May cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause eye irritation.

Symptoms/Injuries After Ingestion: Harmful if swallowed. Symptoms may include: Gastrointestinal irritation. Abdominal pain. Diarrhea. Nausea. Vomiting.

Chronic Symptoms: May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. **Extinguishing Media**

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. **Advice for Firefighters**

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures 6.1.

General Measures: Avoid breathing (vapor, mist, spray). Avoid contact with skin, eyes and clothing.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Use appropriate personal protection equipment (PPE).

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Avoid release to the environment.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. **Methods for Cleaning Up:** Absorb and/or contain spill with inert material, then place in suitable container. Clean up spills immediately and dispose of waste safely. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection. For further information refer to section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store in a well-ventilated place. Keep container tightly closed.

Incompatible Products: Strong acids. Strong bases. Strong oxidizers.

7.3. Specific End Use(s)

Antifreeze/Coolant

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or the Mexican government.

Ethylene glycol (107-21-1)			
Mexico	OEL Ceiling (mg/m ³)	100 mg/m ³ (aerosol)	
USA ACGIH	ACGIH Ceiling (mg/m ³)	100 mg/m ³ (aerosol only)	
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen	
Diethylene g	Diethylene glycol (111-46-6)		
USA AIHA WEEL TWA (mg/m ³) 10 mg/m ³			

8.2. Exposure Controls

Appropriate Engineering Controls

: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Local exhaust and general ventilation must be adequate to meet exposure standards. Site-specific risk assessments should be conducted to determine the appropriate exposure control measures. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. Ensure all national/local regulations are observed.

Personal Protective Equipment

Materials for Protective Clothing

Skin and Body Protection

Consumer Exposure Controls

Respiratory Protection

Hand Protection

Eye Protection

: Protective clothing. Protective goggles. Gloves.



- : Chemically resistant materials and fabrics.
- : Wear chemically resistant protective gloves.
- : Chemical goggles or safety glasses.
- : Wear suitable protective clothing.
- : Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of vapor or mist are expected to exceed exposure limits.
- : Do not eat, drink or smoke during use.

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

9.1. Information on Basic Physical and	Chemical Properties
Physical State	: Liquid
Appearance	: Yellow, slightly viscous Liquid
Odor	: Odorless
Odor Threshold	: No data available
рН	: 8-8.5
Evaporation Rate	: No data available
Melting Point	: No data available
Freezing Point	: -37 °C (-34.6 °F)
Boiling Point	: 129 °C (264.2 °F)
Flash Point	: No data available
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 20 °C	: No data available
Relative Density	: No data available
Specific Gravity	: 1.06 - 1.09
Solubility	: Water: Soluble
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: No data available
Viscosity, Dynamic	: 21 mPa.s
9.2. Other Information No additional info	

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Hazardous reactions will not occur under normal conditions.

10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4. Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Incompatible materials.

10.5. Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

10.6. Hazardous Decomposition Products: Carbon oxides (CO, CO₂). Organic compounds. Carbonyl compounds. Dioxolane. Aldehydes. Alcohols. Ethers.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

Acute Toxicity: Oral: Harmful if swallowed.

World Oil [®] Advance Mulit-Purpose Heavy Duty Extended Life Premix 50/50 Antifreeze		
ATE (Oral)	803.44 mg/kg body weight	
Ethylene glycol (107-21-1)		
LD50 Dermal Rat	10600 mg/kg	
ATE (Oral)	500.00 mg/kg body weight	
Diethylene glycol (111-46-6)		
LD50 Oral Rat	1120 mg/kg	
LD50 Dermal Rabbit	11890 mg/kg	
Hydrated Inorganic and Organic Salts (Proprietary Formulation)		
ATE (Oral)	500.00 mg/kg body weight	
ATE (Gases)	4,500.00 ppmV/4h	
ATE (Vapors)	11.00 mg/l/4h	
ATE (Dust/Mist)	1.50 mg/l/4h	
Vin Conversion (Invitation, Not descrifted		

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Not classified

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

pH: 8 - 8.5

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Specific Target Organ Toxicity (Repeated Exposure): May cause damage to organs through prolonged or repeated exposure. **Aspiration Hazard:** Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: May cause respiratory irritation.

Symptoms/Injuries After Skin Contact: May cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause eye irritation.

Symptoms/Injuries After Ingestion: Harmful if swallowed. Symptoms may include: Gastrointestinal irritation. Abdominal pain. Diarrhea. Nausea. Vomiting.

Chronic Symptoms: May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ethylene glycol (107-21-1)	
LC50 Fish 1	41000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	46300 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	14 - 18 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
Diethylene glycol (111-46-6)	
LC50 Fish 1	75200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	84000 mg/l (Exposure time: 48 h - Species: Daphnia magna)

12.2. Persistence and Degradability No additional information available

12.3. Bioaccumulative Potential

Ethylene glycol (107-21-1)	
Log Pow -1.93	
Diethylene glycol (111-46-6)	
BCF fish 1	100 - 180
Log Pow -1.98 (at 25 °C)	

12.4. Mobility in Soil No additional information available

12.5. Other Adverse Effects

Other Information

: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

Please note: Ethylene glycol has a reportable quantity where if shipped below product is exempt from regulations. For bulk shipments greater than or equal to the Reportable Quantity, please adhere to classification as outlined below. Please see applicable regulations.

14.1. III ACCOLUANCE WITH DOT	14.1.	In Accordance with DOT	
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Proper Shipping Name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (RQ, Ethylene glycol)
Hazard Class	: 9
Identification Number	: UN3082
Label Codes	: 9
Packing Group	: III
ERG Number	: 171
14.2. In Accordance with	IMDG
Proper Shipping Name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (RQ, Ethylene glycol)
Hazard Class	: 9
Identification Number	: UN3082

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

ccording to Federal Register / Vol. 7	7, No. 58 / Monday, March 26, 20	012 / Rules and Regulations
Packing Group	: 111	
Label Codes	: 9	
EmS-No. (Fire)	: F-A	
EmS-No. (Spillage)	: S-F	9
4.3. In Accordance wit	h IATA	
Proper Shipping Name	: ENVIRONMENTAL	LY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (RQ, Ethylene glycol)
Packing Group	: 111	
Identification Number	: UN3082	ALL
Hazard Class	: 9	Allin,
Label Codes	: 9	9
ERG Code (IATA)	: 9L	~
ECTION 15: REGULATO	RY INFORMATION	
L5.1 US Federal Regula		
¥		nded Life Premix 50/50 Antifreeze
SARA Section 311/312 Haz	ard Classes	Immediate (acute) health hazard
		Delayed (chronic) health hazard
Ethylene glycol (107-21-1)		
Listed on the United States	TSCA (Toxic Substances Co	ontrol Act) inventory
Subject to reporting require		
EPA TSCA Regulatory Flag		Y2 - Y2 - indicates an exempt polymer that is a polyester and is made
		only from reactants included in a specified list of low concern
		reactants that comprises one of the eligibility criteria for the
		exemption rule
SARA Section 313 - Emissio	on Reporting	1.0 %
Diethylene glycol (111-46-	6)	
Listed on the United States		ontrol Act) inventory
EPA TSCA Regulatory Flag		Y2 - Y2 - indicates an exempt polymer that is a polyester and is made
0 , 0		only from reactants included in a specified list of low concern
		reactants that comprises one of the eligibility criteria for the
		exemption rule
Water (7732-18-5)		
Listed on the United States	TSCA (Toxic Substances Co	ontrol Act) inventory
L5.2 US State Regulation	 ons	· · · ·
Ethylene glycol (107-21-1)	5115	
U.S California - Propositi	on 65 - Develonmental	
Toxicity	on os bevelopmentar	VARNING: This product can expose you to chemicals including
· chicky		ethylene glycol, which is known to the State of California to cause birth defects or other reproductive harm. For MOR
		information, go to www.P65Warnings.ca.gov.
Ethylene glycol (107-21-1)		
U.S Massachusetts - Righ	t To Know List	
U.S New Jersey - Right to		se list
U.S Pennsylvania - RTK (R		
U.S Pennsylvania - RTK (R		
Diethylene glycol (111-46-		
U.S Pennsylvania - RTK (R	-	
•	-	IG DATE OF PREPARATION OR LAST REVISION
	-	IS DATE OF FREFARATION ON LAST NEVISION
Revision Date :	10/13/2017	and the second sec
Other Information :		prepared in accordance with the SDS requirements of the OSHA Hazard
		d 29 CFR 1910.1200. To the best of our knowledge, the information
		rate. However, neither the above named supplier nor any of its subsidiaries
		atsoever for the accuracy or completeness of the information contained
		on of suitability of any material is the sole responsibility of the user. All
		nknown hazards and should be used with caution. Although certain hazard
	are described herein, we	cannot guarantee that these are the only hazards that exist.

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

GHS Fu	ll Text Phrases:	
Γ	Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
-	Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
	Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
	Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
	Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
	Skin Irrit. 2	Skin corrosion/irritation Category 2
	STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
	STOT SE 3	Specific target organ toxicity (single exposure) Category 3
	H302	Harmful if swallowed
	H315	Causes skin irritation
	H319	Causes serious eye irritation
	H332	Harmful if inhaled
	H335	May cause respiratory irritation
	H373	May cause damage to organs through prolonged or repeated exposu
	H402	Harmful to aquatic life
	H412	Harmful to aquatic life with long lasting effects
	lealth Hazard ire Hazard	 : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given. : 1 - Must be preheated before ignition can occur.
NFPA F	Reactivity	 1 - Must be prefeated before ignition can occur. : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.
Health	•	: 2 Moderate Hazard - Temporary or minor injury may occur
Flamm		: 1 Slight Hazard
Physica	-	: 0 Minimal Hazard
•	al Protection	: B

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)