SAFETY DATA SHEET

Mystik JT-4® Synthetic 4-Cycle SAE 10W-40 Marine Engine Oil



Section 1. Identification

GHS product identifier	: Mystik JT-4® Synthetic 4-Cycle SAE 10W-40 Marine Engine Oil
Synonyms	: Motor oil
Code	: 663093002
MSDS #	: 663093002
Supplier's details	: CITGO Petroleum Corporation P.O. Box 4689 Houston, TX 77210 sdsvend@citgo.com
Emergency telephone number (with hours of operation)	: Technical Contact: (800) 248-4684 Medical Emergency: (832) 486-4700 CHEMTREC Emergency: (800) 424-9300 (United States Only)
Section 2. Hazar	ds identification
OSHA/HCS status	: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

substance or mixture	
GHS label elements	
Signal word	: No signal word.
Hazard statements	: No known significant effects or critical hazards.
Precautionary statements	
Prevention	: Not applicable.
Response	: Not applicable.
Storage	: Not applicable.
Disposal	: Not applicable.
Hazards not otherwise classified	: None known.

: Not classified.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Motor oil
identification	

CAS number/other identifiers

Classification of the

CAS number : Not applicable.		
Ingredient name	%	CAS number
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based Distillates (petroleum), hydrotreated heavy paraffinic Distillates (petroleum), solvent-dewaxed heavy paraffinic Alkaryl amine		72623-87-1 64742-54-7 64742-65-0 -

Any concentration shown as a range is to protect confidentiality or is due to process variation.

Section 3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necess	ary first aid measures
Eye contact	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	 Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

I Otential acute nearth	<u>enects</u>
Eye contact	: No known significant effects or critical hazards.
Inhalation	: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/	<u>symptoms</u>
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.
Indication of immediate	e medical attention and special treatment needed, if necessary
Notes to physician	 In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	: Treat symptomatically and supportively.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst.

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Section 5. Fire-fighting measures

Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides phosphorus oxides metal oxide/oxides
Special protective actions for fire-fighters	 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for co	ontainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling		
Protective measures	÷	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 7. Handling and storage

Bulk Storage Conditions: Maintain all storage tanks in accordance with applicable regulations. Use necessary controls to monitor tank inventories. Inspect all storage tanks on a periodic basis. Test tanks and associated piping for tightness. Maintain the automatic leak detection devices to assure proper working condition.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based

NIOSH REL (United States, 10/2016).

TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist ACGIH TLV (United States). TWA: 5 mg/m **OSHA PEL** (United States). TWA: 5 mg/m³ ACGIH TLV (United States, 3/2019). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction OSHA PEL (United States, 5/2018). TWA: 5 mg/m³ 8 hours. NIOSH REL (United States, 10/2016). TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist ACGIH TLV (United States, 3/2019). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction OSHA PEL (United States, 5/2018). TWA: 5 mg/m³ 8 hours. NIOSH REL (United States, 10/2016). TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist

Distillates (petroleum), solvent-dewaxed heavy paraffinic

Distillates (petroleum), hydrotreated heavy paraffinic

Appropriate engineering controls	: Good ger contamin	neral ventilation should be a ants.	sufficient to control v	vorker exposure to airbo	rne
Environmental exposure controls	they com cases, va	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, vapor controls, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.			me
Individual protection meas	ures				
Hygiene measures	eating, sr Appropria Wash co	nds, forearms and face tho noking and using the lavate ate techniques should be us ntaminated clothing before are close to the workstatior	ory and at the end of sed to remove poten reusing. Ensure that	f the working period. Itially contaminated cloth	ning.
Eye/face protection	industrial the asses Safety ey assessm	asses equipped with side s settings. If contact is poss sement indicates a higher d rewear complying with an a ent indicates this is necess dusts. If inhalation hazard	ible, the following pr egree of protection: pproved standard sh ary to avoid exposu	rotection should be worn chemical splash goggle nould be used when a ris re to liquid splashes, mis	n, unless es. sk sts,
Skin protection					
Hand protection		l-resistant gloves complying en handling chemical produ			
Body protection	performe	protective equipment for th d and the risks involved an this product.			
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Section 8. Exposure controls/personal protection

Other skin protection	Avoid skin contact with liquid. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Leather boots are not protective for liquid contact.
Respiratory protection	: Avoid inhalation of gases, vapors, mists or dusts. Use a properly fitted, air-purifying or supplied-air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance	
Physical state	: Liquid.
Color	: Amber to dark amber
Odor	: Mild petroleum odor
рН	: Not available.
Boiling point	: Not available.
Flash point	: Open cup: 234°C (453.2°F) [Cleveland.]
Evaporation rate	: <1 (butyl acetate = 1)
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: <0.13 kPa (<1 mm Hg) [room temperature]
Vapor density	: >1 [Air = 1]
Relative density	: 0.87
Density lbs/gal	: Estimated 7.25 lbs/gal
Density gm/cm ³	: Not available.
Gravity, °API	: Estimated 31 @ 60 F
Solubility	: Insoluble in the following materials: cold water.
Flow time (ISO 2431)	: Not available.
Viscosity	: Kinematic (room temperature): Not applicable. Kinematic (40°C (104°F)): 0.984 cm ² /s (98.4 cSt)
Viscosity SUS	: Estimated 456 SUS @104 F

Section 10. Stability and reactivity

Reactivity	: Not expected to be Explosive, Self-Reactive, Self-Heating, or an Organic Peroxide under US GHS Definition(s).
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects Acute toxicity

Acute toxicity	1	1	1	1
Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), hydrotreated heavy paraffinic	LD50 Dermal	Rat	>5000 mg/kg	-
Distillates (petroleum), solvent-dewaxed heavy	LD50 Oral LD50 Dermal	Rat Rabbit	>5000 mg/kg >5000 mg/kg	-
paraffinic	LD50 Oral	Rat	>5000 mg/kg	-
Conclusion/Summary	 Distillates (petroleum), hydrotreated heavy paraffinic: Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects. Distillates (petroleum), solvent-dewaxed heavy paraffinic: Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects. 			
Irritation/Corrosion Not available.				
Skin	: No additional information.			
Eyes	No additional information.			
Respiratory Sensitization Not available.	No additional information.			
Skin	: No additional information.			
Respiratory <u>Mutagenicity</u> Not available.	No additional information.			
Conclusion/Summary	: No additional information.			
Carcinogenicity Not available.				
Conclusion/Summary <u>Reproductive toxicity</u> Not available.	: No additional information.			
Conclusion/Summary <u>Teratogenicity</u> Not available.	: No additional information.			
Conclusion/Summary	: No additional information.			
<u>Specific target organ toxicity (single exposure)</u> Not available.				
Specific target organ toxicity Not available.	<u>(repeated exposure)</u>			

Section 11. Toxicological information

Aspiration hazard

Not available.

Information on the likely routes of exposure	: Routes of entry anticipated: Dermal.
Potential acute health effects	<u>5</u>
Eye contact	: No known significant effects or critical hazards.
Inhalation	: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Symptoms related to the phy	vsical, chemical and toxicological characteristics
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.
Delayed and immediate effect	ts and also chronic effects from short and long term exposure
Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	<u>ects</u>
Not available.	
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Section 12. Ecological information

Toxicity Not available.					
Conclusion/Summary	: Not availa	able.			
Persistence and degradab	ility				
Not available. Conclusion/Summary	: Not availa	able.			
Bioaccumulative potential					
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Section 12. Ecological information

Product/ingredient name	LogPow	BCF	Potential
Alkaryl amine	3.64 to 7.02	1730	high

<u>Mobility in soil</u>	
Soil/water partition coefficient (Koc)	: Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal	methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	ΙΑΤΑ
UN number	Not regulated.	Not available.	Not available.
UN proper shipping name	-	Not available.	Not available.
Transport hazard class(es)	-	Not available.	Not available.
Packing group	-	-	-
Environmental hazards	No.	No.	No.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to Annex II of MARPOL and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations	 United States inventory (TSCA 8b): All components are listed or exempted. Clean Water Act (CWA) 307: zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis (phosphorodithioate); Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl)
	esters, zinc salts; benzene
	Clean Water Act (CWA) 311: benzene
	This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.
SARA 302/304	
Composition/informatio	n on ingredients
SARA 304 RQ	: Not applicable.

SARA 311/312 Classification

: Not applicable.

Composition/information on ingredients

No products were found.

State regulations	
Massachusetts	: None of the components are listed.
New York	: None of the components are listed.
New Jersey	: None of the components are listed.
Pennsylvania	: None of the components are listed.

California Prop. 65 Clear and Reasonable Warnings (2018)

WARNING: This product can expose you to Benzene (obsolete), which is known to the State of California to cause cancer and birth defects or other reproductive harm. This product can expose you to Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings. ca.gov.

International regulations

Inventory list

United States	: All components are listed or exempted.
Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Europe	: Not determined.
Japan	: Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.
Malaysia	: Not determined.
New Zealand	: All components are listed or exempted.
Philippines	: Not determined.
Republic of Korea	: All components are listed or exempted.
Taiwan	: Not determined.
Thailand	: Not determined.
Turkey	: Not determined.
Viet Nam	: Not determined.

Section 16. Other information

National Fire Protection Association (U.S.A.)



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Procedure used to derive the classification

Classification		Justification
Not classified.		
History		
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Version	: 2	
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations	
References	: Not available.	

Indicates information that has changed from previously issued version.

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