



# SAFETY DATA SHEET

SDS ID NO.: 0199MAR020

Revision date 11/30/2021

## 1. IDENTIFICATION

**Product Name** MPC Catalytic Cycle Oil

**Synonym** Catalytic Cycle Oil; Cat Cracked Distillate; LCO; CCO; CGO; Light Cat Cracked Cycle Oil; Light Cat Cracked Distillate; Light Cat Cycle Oil; Light Cycle Oil; Light Cracked Gas Oil; Stove Oil

**Product code** 0199MAR020

**Chemical family** Petroleum Gas Oil

**Recommended use** Refinery Stream.

**Restrictions on use** All others.

**Manufacturer, Importer, or Responsible Party Name and Address**  
**MARATHON PETROLEUM COMPANY LP**  
**539 South Main Street**  
**Findlay, OH 45840**

**SDS Information** 1-419-421-3070 (M-F; 8-5 EST)

**24 Hour Emergency Telephone** CHEMTREC: 1-800-424-9300 (CCN# 13740)

## 2. HAZARD IDENTIFICATION

### OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

### Classification

Flammable liquids	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Carcinogenicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

### Hazards Not Otherwise Classified (HNOC)

Static accumulating flammable liquid

### Label Elements

#### **Danger**

FLAMMABLE LIQUID AND VAPOR  
May accumulate electrostatic charge and ignite or explode  
May be fatal if swallowed and enters airways  
Harmful if inhaled  
Causes skin irritation  
May cause cancer  
May cause damage to organs (thymus, liver, blood) through prolonged or repeated exposure  
Very toxic to aquatic life with long lasting effects

**Appearance** Cloudy**Physical State** Liquid**Odor** Hydrocarbon**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 Keep container tightly closed  
 Ground/bond container and receiving equipment  
 Use explosion-proof electrical/ventilating/lighting/equipment  
 Use only non-sparking tools.  
 Take precautionary measures against static discharge  
 Do not breathe mist/vapors/spray  
 Use only outdoors or in a well-ventilated area  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Wash hands and any possibly exposed skin thoroughly after handling  
 Avoid release to the environment

**Precautionary Statements - Response**

If exposed, concerned or you feel unwell: Get medical attention  
 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
 If skin irritation occurs: Get medical attention  
 Wash contaminated clothing before reuse  
 If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing  
 Call a poison center or doctor if you feel unwell  
 If swallowed: Immediately call a poison center or doctor  
 Do NOT induce vomiting  
 In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction.  
 Collect spillage

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool  
 Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container at an approved waste disposal plant

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Catalytic Cycle Oil is a complex mixture of paraffinic, cycloparaffinic, olefinic and aromatic hydrocarbons (predominantly C<sub>9</sub> through C<sub>30</sub>) produced by the distillation of products from a catalytic cracking process.

**Composition Information**

Name	CAS Number	% Concentration
Distillates (petroleum), light catalytic cracked	64741-59-9	0-100
Distillate, Catalytic Cracked Intermediate	64741-60-2	0-100
Sulfur Compounds	Mixture	0-0.05

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

## 4. FIRST AID MEASURES

### First aid measures

<b>General advice</b>	In case of accident or if you feel unwell, seek medical advice immediately (show directions for use or safety data sheet if possible).
<b>Inhalation</b>	Remove to fresh air. If not breathing, utilize bag valve mask or other form of barrier device to institute rescue breathing. If breathing is difficult, ensure airway is clear, give oxygen and continue to monitor. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). Keep affected person warm and at rest. Get immediate medical attention.
<b>Skin contact</b>	Immediately wash exposed skin with plenty of soap and water while removing contaminated clothing and shoes. Get medical attention if irritation persists. Place contaminated clothing in closed container until cleaned or discarded. If clothing is to be laundered, inform the person performing the operation of contaminant's hazardous properties. Destroy contaminated, non-chemical resistant footwear.
<b>Eye contact</b>	Flush immediately with large amounts of water for at least 15 minutes. Gently remove contacts while flushing. Eyelids should be held away from the eyeball to ensure thorough rinsing. Gently remove contacts while flushing. Get medical attention if irritation persists.
<b>Ingestion</b>	Do not induce vomiting because of danger of aspirating liquid into lungs, causing serious damage and chemical pneumonitis. If spontaneous vomiting occurs, keep head below hips, or if patient is lying down, turn body and head to side to prevent aspiration and monitor for breathing difficulty. Never give anything by mouth to an unconscious person. Keep affected person warm and at rest. Get immediate medical attention.

### Most important signs and symptoms, both short-term and delayed with overexposure

<b>Adverse effects</b>	Irritating to the skin and mucous membranes. Symptoms may include redness, itching, and inflammation. Inhalation of high vapor concentrations may cause respiratory irritation, headache, dizziness, tiredness, nausea and vomiting. Aspiration hazard. May cause coughing, chest pains, shortness of breath, pulmonary edema and/or chemical pneumonitis. Prolonged or repeated exposure may cause adverse effects to the thymus, liver and blood. Repeated or prolonged skin contact may cause drying, reddening, itching and cracking.
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### Indication of any immediate medical attention and special treatment needed

<b>Notes to physician</b>	INGESTION: This material represents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended.
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## 5. FIRE-FIGHTING MEASURES

<b>Suitable extinguishing media</b>	For small fires, Class B fire extinguishing media such as CO <sub>2</sub> , dry chemical, foam or water spray can be used. For large fires, water spray, fog or foam can be used. Firefighting should be attempted only by those who are adequately trained and equipped with proper protective equipment.
<b>Unsuitable extinguishing media</b>	Do not use straight water streams to avoid spreading fire.
<b>Specific hazards arising from the chemical</b>	This product has been determined to be a flammable liquid per the OSHA Hazard Communication Standard and should be handled accordingly. May accumulate electrostatic charge and ignite or explode. Vapors may travel along the ground or be moved by ventilation and ignited by many sources such as pilot lights, sparks, electric motors, static discharge, or other ignition sources at locations distant from material handling. Flashback can occur along vapor trail. For additional fire related information, see NFPA 30 or the Emergency Response Guidebook 128.
<b>Hazardous combustion products</b>	Smoke, carbon monoxide, and other products of incomplete combustion.

<b>Explosion data</b>	
<b>Sensitivity to mechanical impact:</b>	No.
<b>Sensitivity to static discharge:</b>	Yes.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters should wear full protective clothing and positive-pressure self-contained breathing apparatus (SCBA) with a full face-piece, as appropriate. Avoid using straight water streams. Water spray and foam must be applied carefully to avoid frothing and from as far a distance as possible. Avoid excessive water spray application. Keep surrounding area cool with water spray from a distance and prevent further ignition of combustible material. Keep run-off water out of sewers and water sources.
<b>Additional firefighting tactics</b>	<p><b>FIRES INVOLVING TANKS OR CAR/TRAILER LOADS:</b> Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after the fire is out. Do not direct water at source of leak or safety devices; icing may occur. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.</p> <p><b>EVACUATION:</b> Consider initial downwind evacuation for at least 1000 feet. If tank, rail car or tank truck is involved in a fire, ISOLATE for 5280 feet (1 mile) in all directions; also, consider initial evacuation of 5280 feet (1 mile) in all directions.</p>
<b>NFPA</b>	Health 2                      Flammability 2                      Instability 0                      Special Hazard -

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Keep public away. Isolate and evacuate area. Shut off source if safe to do so. Eliminate all ignition sources. All contaminated surfaces will be slippery.
<b>Protective equipment</b>	Use personal protection measures as recommended in Section 8.
<b>Emergency procedures</b>	Advise authorities and National Response Center (800-424-8802) if the product has entered a water course or sewer. Notify local health and pollution control agencies, if appropriate.
<b>Environmental precautions</b>	Avoid release to the environment. Avoid subsoil penetration.
<b>Methods and materials for containment</b>	Contain liquid with sand or soil. Prevent spilled material from entering storm drains, sewers, and open waterways.
<b>Methods and materials for cleaning up</b>	Use suitable absorbent materials such as vermiculite, sand, or clay to clean up residual liquids. Recover and return free product to proper containers. When recovering free liquids ensure all equipment is grounded and bonded. Use only non-sparking tools.

## 7. HANDLING AND STORAGE

<b>Safe handling precautions</b>	Use appropriate grounding and bonding practices. Static accumulating flammable liquid. Bonding and grounding may be insufficient to eliminate the hazard from static electricity. Do not expose to heat, open flames, strong oxidizers or other sources of ignition. Vapors may travel along the ground or be moved by ventilation. Flashback may occur along vapor trails. No smoking. Use only non-sparking tools. Avoid repeated and prolonged skin contact. Use personal protection measures as recommended in Section 8. Exercise good personal hygiene including removal of soiled clothing and prompt washing with soap and water. Do not cut, drill, grind or weld on empty containers since explosive residues may remain. To avoid the combustible dust hazard, minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and
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mixing operations and cause an electrical spark. Provide adequate precautions, such as electrical grounding and bonding, or nonreactive atmospheres. Use non-sparking tools. Refer to applicable EPA, OSHA, NFPA and consistent state and local requirements.

Components of this product are basically non-conductors of electricity and can become electrostatically charged during mixing, filtering or pumping at high flow rates. If this charge reaches a sufficiently high level, sparks can form that may ignite the vapors of flammable liquids. Sudden release of hot organic vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources.

**Storage conditions** Store in properly closed containers that are appropriately labeled and in a cool, well-ventilated area.

**Incompatible materials** Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Notes:** No further information available.

**Engineering measures** Local or general exhaust required in an enclosed area or when there is inadequate ventilation. Use mechanical ventilation equipment that is explosion-proof.

### Personal protective equipment

**Eye protection** Use goggles or face-shield if the potential for splashing exists.

**Skin and body protection** Wear impermeable gloves (e.g., nitrile, Viton®, tyvek/saranex 23) to prevent skin contact. Glove suitability is based on workplace conditions and usage. Contact the glove manufacturer for specific advice on glove selection and breakthrough times.

**Respiratory protection** Use a NIOSH approved organic vapor chemical cartridge or supplied air respirators when there is the potential for airborne exposures to exceed permissible exposure limits or if excessive vapors are generated. Self-contained breathing apparatus should be used for fire fighting.

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Appearance</b>	Cloudy
<b>Physical State</b>	Liquid
<b>Color</b>	Amber to Brown
<b>Odor</b>	Hydrocarbon
<b>Odor Threshold</b>	No data available.

<u>Property</u>	<u>Values (method)</u>
<b>pH</b>	Not applicable
<b>Melting Point / Freezing Point</b>	No data available.
<b>Initial Boiling Point / Boiling Range</b>	93-378 °C / 207-712 °F
<b>Flash Point</b>	48.8 °C / 120 °F (ASTM D93)
<b>Evaporation Rate</b>	No data available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Flammability Limit in Air (%):</b>	
<b>Upper Flammability Limit:</b>	No data available.
<b>Lower Flammability Limit:</b>	No data available.
<b>Explosion Limits</b>	No data available.

Vapor Pressure	No data available.
Vapor Density	No data available.
Specific Gravity / Relative Density	0.81-1.02 (ASTM D4052)
Water Solubility	No data available.
Partition Coefficient	No data available.
Autoignition Temperature	No data available.
Decomposition Temperature	No data available.
Kinematic Viscosity	1.34-4.66 cSt @ 40°C (ASTM D445)
VOC Content (%)	No data available.
Density	6.76-8.55 lbs/gal

## 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	The product is non-reactive under normal conditions.
<b>Chemical stability</b>	The material is stable at 70°F (21°C ), 760 mmHg pressure.
<b>Possibility of hazardous reactions</b>	None under normal processing.
<b>Hazardous polymerization</b>	Will not occur.
<b>Conditions to avoid</b>	Excessive heat, sources of ignition, open flame.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	None known under normal conditions of use.

## 11. TOXICOLOGICAL INFORMATION

### Potential short-term adverse effects from overexposures

<b>Inhalation</b>	Harmful if inhaled. Exposure to high vapor concentrations may produce headache, giddiness, vertigo, and anesthetic stupor.
<b>Eye contact</b>	Exposure to vapor or contact with liquid may cause mild eye irritation, including tearing, stinging, and redness.
<b>Skin contact</b>	Irritating to skin. Effects may become more serious with repeated or prolonged contact.
<b>Ingestion</b>	May be fatal if swallowed or vomited and enters airways. May cause irritation of the mouth, throat and gastrointestinal tract.

### Acute toxicological data

Name	Oral LD50	Dermal LD50	Inhalation LC50
Distillates (petroleum), light catalytic cracked 64741-59-9	> 3200 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	4.65 mg/l (Rat) 4 h
Distillate, Catalytic Cracked Intermediate 64741-60-2	> 3200 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	4.65 mg/l (Rat) 4 h
Sulfur Compounds Mixture	-	-	>5 mg/l (Rat) 4 h

### Immediate and delayed effects as well as chronic effects from short and long-term exposure

LIGHT CAT CRACKED CYCLE OIL: Lifetime dermal exposure produced increased dermal tumors in laboratory mice. Mutagenic in the Ames assay. Repeated maternally-toxic dermal exposures resulted in reduced litter size and litter weight, and increased fetal resorptions in laboratory animals. Dermal exposure to high concentrations resulted in changes in liver, kidney, and thymus weight, severe skin irritation with weight loss, and some mortality. Inhalation exposure to high concentrations resulted in respiratory tract irritation, lung changes, and reduction in lung function.

Lifetime skin painting studies in animals with light and heavy vacuum distillates and with light and heavy catalytically cracked distillates produced skin tumors in animals. Repeated dermal application has produced severe irritation and systemic toxicity in subacute toxicity studies.

### Adverse effects related to the physical, chemical and toxicological characteristics

<b>Signs and symptoms</b>	Irritating to the skin and mucous membranes. Symptoms may include redness, itching, and inflammation. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Aspiration hazard. May cause coughing, chest pains, shortness of breath, pulmonary edema and/or chemical pneumonitis. Prolonged or repeated exposure may cause damage to organs. Repeated exposure may cause skin dryness or cracking.
<b>Acute toxicity</b>	Harmful if inhaled.
<b>Skin corrosion/irritation</b>	Causes skin irritation.
<b>Serious eye damage/eye irritation</b>	None known.
<b>Sensitization</b>	None known.
<b>Mutagenic effects</b>	None known.
<b>Carcinogenicity</b>	May cause cancer.
<b>Reproductive toxicity</b>	None known.
<b>Specific Target Organ Toxicity (STOT) - single exposure</b>	Not classified.
<b>Specific Target Organ Toxicity (STOT) - repeated exposure</b>	May cause damage to organs (thymus, liver, blood) through prolonged or repeated exposure.
<b>Aspiration hazard</b>	May be fatal if swallowed or vomited and enters airways.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** This product should be considered very toxic to aquatic organisms, with the potential to cause long lasting adverse effects in the aquatic environment.

Name	Fish	Crustacea	Algae/aquatic plants
Distillates (petroleum), light catalytic cracked 64741-59-9	96-hr LC50 = 7.3 mg/L Zebrafish	48-hr EL50 < 1 mg/l Daphnia	-
Distillate, Catalytic Cracked Intermediate 64741-60-2	96-hr LC50 = 7.3 mg/L Zebrafish	48-hr EL50 < 1 mg/l Daphnia	-

<b>Persistence and degradability</b>	Expected to be inherently biodegradable.
<b>Bioaccumulation</b>	Has the potential to bioaccumulate.
<b>Mobility in soil</b>	May partition into air, soil and water.
<b>Other adverse effects</b>	No information available.

## 13. DISPOSAL CONSIDERATIONS

<b>Description of waste residues</b>	This material may be a flammable liquid waste.
<b>Safe handling of wastes</b>	Handle in accordance with applicable local, state, and federal regulations. Use personal

protection measures as required. Use appropriate grounding and bonding practices. Use only non-sparking tools. Do not expose to heat, open flames, strong oxidizers or other sources of ignition. No smoking.

<b>Disposal of wastes / methods of disposal</b>	The user is responsible for determining if any discarded material is a hazardous waste (40 CFR 262.11). Dispose of in accordance with federal, state and local regulations.
<b>Contaminated packaging disposal</b>	Empty containers should be completely drained and then discarded or recycled, if possible. Do not cut, drill, grind or weld on empty containers since explosive residues may be present. Dispose of in accordance with federal, state and local regulations.

## 14. TRANSPORT INFORMATION

### DOT

<b>UN/Identification No:</b>	UN 1202
<b>UN Proper Shipping Name:</b>	Gas Oil
<b>Transport Hazard Class(es):</b>	3
<b>Packing Group:</b>	III

### IATA

<b>UN/Identification No:</b>	UN 1202
<b>UN Proper Shipping Name:</b>	Gas Oil
<b>Transport Hazard Class(es):</b>	3
<b>Packing Group:</b>	III
<b>ERG code:</b>	3L

### IMDG

<b>UN/Identification No:</b>	UN 1202
<b>UN Proper Shipping Name:</b>	Gas Oil
<b>Transport Hazard Class(es):</b>	3
<b>Packing Group:</b>	III
<b>EmS No:</b>	F-E, S-E
<b>Marine Pollutant:</b>	Yes

## 15. REGULATORY INFORMATION

### Regulatory Information

<b>US TSCA Chemical Inventory</b>	This product and/or its components are listed on the TSCA Chemical Inventory or are exempt.
<b>Canada DSL/NDSL Inventory</b>	This product and/or its components are listed either on the Domestic Substances List (DSL) or are exempt.
<b><u>EPA Superfund Amendment &amp; Reauthorization Act (SARA)</u></b>	
<b>SARA Section 302</b>	This product does not contain any component(s) included on EPA's Extremely Hazardous Substance (EHS) List above the de minimis threshold.
<b>SARA Section 304</b>	This product does not contain any component(s) identified as an EHS or a CERCLA Hazardous substance above the de minimis threshold.
<b>SARA Section 311/312</b>	The following EPA hazard categories apply to this product:  Flammable Hazard Not Otherwise Classified (HNOC)-Physical Acute toxicity Skin corrosion or irritation



Carcinogenicity  
 Specific target organ toxicity  
 Aspiration hazard

**SARA Section 313**

This product may contain component(s), which if in exceedance of the de minimus threshold, may be subject to the reporting requirements of SARA Title III Section 313 Toxic Release Reporting (Form R).

**U.S. State Regulations****California Proposition 65**

This product does not contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**State Right-To-Know Regulations** This material is not known to be identified on any State Right-To-Know regulation list.

Name	New Jersey Right-To-Know	Pennsylvania Right-To-Know	Massachusetts Right-To-Know
Sulfur Compounds Mixture	Listed	Listed	Listed

## 16. OTHER INFORMATION

**Prepared by**

Toxicology & Product Safety

**NFPA****Revision Notes****Revision date**

11/30/2021

**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 is intended as guidance for safe handling, use, processing, storage, transportation, accidental release, clean-up and disposal and is not 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.

## 17. MPC COMMENTS (non-publishable)