

# SAFETY DATA SHEET

**SDS ID NO.:** 0348MAR019 **Revision Date** 07/22/2016

# 1. IDENTIFICATION

Product Name: Marathon Petroleum Crude Glycerine

Synonym: 1,2,3-Propanetriol; Glycerin; Glycol Alcohol; Glycerol

Product Code: 0348MAR019

Chemical Family: Triol, Aliphatic Alcohol

Recommended Use: As a multi-purpose, Crude-Form Mixture by Up-Chain/Mid-Chain Manufacturers and

Processors, where further refinement or processing will occur.

Restrictions on Use: The product as described herein is not-fit-for-use, without further evaluation and processing

by the subsequent user(s) of this product in the USA or other jurisdiction, in the following

products:

• Any pesticide as such term is defined in the Federal Insecticide, Fungicide, and

Rodenticide Act (7 U.S.C. 136 et seq.);

• Any food, food additive, color additive, drug, cosmetic, or medical or veterinary device or product, including materials intended for use as ingredients in such products (e.g. flavors and fragrances), as such terms are defined in the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.) or the Virus-Serum-Toxin Act of 1913 (21 U.S.C. 151 et seq.), by

either the Food and Drug Administration or the Department of Agriculture; or

• Any other industrial, commercial, or consumer product that requires meeting discrete specifications and/or regulations for such use, which includes but is not limited to lubricants,

paints, consumables, research, testing, or other goods.

Manufacturer, Importer, or Responsible Party Name and Address: Cincinnati Renewable Fuels LLC A Subsidiary of Marathon Petroleum Corporation 4700 Este Ave Cincinnati, OH 45232

**SDS information:** 1-419-421-3070

Emergency Telephone: 1-877-627-5463

# 2. HAZARD IDENTIFICATION

## Classification

## **OSHA Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not classified

## **Hazards Not Otherwise Classified (HNOC)**

Not applicable.

### Label elements

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#### **EMERGENCY OVERVIEW**

Appearance Viscous, Translucent, Hazy, Physical State Liquid Odor Mild to Moderate Grainy Clear to Amber Liquid

**Precautionary Statements - Prevention** 

Not applicable.

**Precautionary Statements - Response** 

Not applicable.

**Precautionary Statements - Storage** 

Not applicable.

**Precautionary Statements - Disposal** 

Not applicable.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

## **Composition Information:**

| Name                      | CAS Number | % Concentration |
|---------------------------|------------|-----------------|
| Glycerine                 | 56-81-5    | 82-87           |
| Sodium Chloride           | 7647-14-5  | 3.0-6.5         |
| Fatty Acids               | 68308-53-2 | 0-1.5           |
| Methanol (Methyl Alcohol) | 67-56-1    | 0.2-0.6         |

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** 

General Advice: In case of accident or if you feel unwell, seek medical advice immediately (show directions

for use or safety data sheet if possible).

**Inhalation:** Move victim to fresh air. Provide respiratory support, if necessary. Get medical attention if

cough or other respiratory symptoms develop.

**Skin Contact:** Wash skin with plenty of soap and water. Get medical attention if irritation persists.

Eye Contact: Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be

held away from the eyeball to ensure thorough rinsing. Gently remove contacts while

flushing. Get medical attention if irritation persists.

Ingestion: If swallowed, DO NOT induce vomiting. 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. If symptoms develop, seek medical attention.

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

Adverse Effects: Repeated or prolonged skin contact may cause drying, reddening, itching and cracking.

Indication of any immediate medical attention and special treatment needed

Notes To Physician: Contains small amounts of methanol (up to 0.6%). Methanol can induce metabolic acidosis

with delayed effects. If the product is ingested consider the use of ethanol or fomepizole (Antizol) and hemodialysis. Consult standard literature or contact a poison control center for

treatment details.

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# 5. FIRE-FIGHTING MEASURES

## Suitable extinguishing media

For small fires, Class B fire extinguishing media such as CO2, 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.

## Unsuitable extinguishing media

Do not use straight water streams to avoid spreading fire.

#### Specific hazards arising from the chemical

This product is not a flammable liquid per the OSHA Hazard Communication Standard, but may ignite and/or burn at temperatures exceeding the flash point. Spontaneous combustion may occur under high temperature, closed conditions if material is absorbed in various fiber matrices and oxygen is present (e.g. oily rags). For additional fire related information, see NFPA 30 or the Emergency Response Guidebook 128.

#### **Hazardous combustion products**

Smoke, carbon monoxide, and other products of incomplete combustion.

## **Explosion data**

Sensitivity to Mechanical Impact No. Sensitivity to Static Discharge No.

## Special protective equipment and precautions for firefighters

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 (AFFF/ATC) must be applied carefully to avoid frothing and from as far a distance as possible. Avoid excessive water spray application. Keep run-off water out of sewers and water sources.

#### Additional firefighting tactics

Not applicable.

Health 1 Flammability 1 Instability 0 Special Hazard -NFPA

# 6. ACCIDENTAL RELEASE MEASURES

Keep public away. Isolate and evacuate area. Shut off source if safe to do so. All Personal precautions:

contaminated surfaces will be slippery.

**Protective equipment:** Use personal protection measures as recommended in Section 8.

Advise authorities and National Response Center (800-424-8802) if the product has **Emergency procedures:** 

entered a water course or sewer. Notify local health and pollution control agencies, if

appropriate.

**Environmental precautions:** Avoid release to the environment. Avoid subsoil penetration.

Methods and materials for

containment:

up:

Contain liquid with sand or soil.

Methods and materials for cleaning Use suitable absorbent materials such as vermiculite, sand, or clay to clean up residual liquids. Recover and return free product to proper containers. Clean contaminated surface

thoroughly.

# 7. HANDLING AND STORAGE

**Safe Handling Precautions:** Avoid repeated and prolonged skin contact. Avoid breathing vapors or mists. Use only with adequate ventilation. Refer to applicable EPA, OSHA, NFPA and consistent state and local

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requirements.

Storage Conditions: Store in properly closed containers that are appropriately labeled and in a cool,

well-ventilated area. Keep containers dry and tightly closed to avoid moisture absorption and contamination. Store wiping rags in metal cans with tightly fitting lids. Keep away from

heat and sources of ignition.

Incompatible Materials Strong oxidizing agents.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| Name                      | ACGIH TLV                    | OSHA PELS:                 | OSHA - Vacated PELs         | NIOSH IDLH |
|---------------------------|------------------------------|----------------------------|-----------------------------|------------|
| Glycerine                 | -                            | TWA: 5 mg/m <sup>3</sup>   | 5 mg/m³ TWA                 | -          |
| 56-81-5                   |                              | mist, respirable fraction  | mist, respirable fraction   |            |
|                           |                              | TWA: 15 mg/m <sup>3</sup>  | 10 mg/m³ TWA                |            |
|                           |                              | mist, total dust           | mist, total dust            |            |
| Sodium Chloride           | -                            | -                          | -                           | -          |
| 7647-14-5                 |                              |                            |                             |            |
| Fatty Acids               | -                            | -                          | -                           | -          |
| 68308-53-2                |                              |                            |                             |            |
| Methanol (Methyl Alcohol) | 200 ppm TWA                  | TWA: 200 ppm               | TWA: 200 ppm                | 6000 ppm   |
| 67-56-1                   | 250 ppm STEL                 | TWA: 260 mg/m <sup>3</sup> | TWA: 260 mg/m <sup>3</sup>  |            |
|                           | Skin - potential significant |                            | STEL: 250 ppm               |            |
|                           | contribution to overall      |                            | STEL: 325 mg/m <sup>3</sup> |            |
|                           | exposure by the cutaneous    |                            | Skin*                       |            |
|                           | route                        |                            |                             |            |

Notes: The manufacturer has voluntarily elected to provide exposure limits contained in OSHA's

1989 air contaminants standard in its SDSs, even though certain of those exposure limits

were vacated in 1992.

Engineering measures: Local or general exhaust required when using at elevated temperatures that generate

vapors or mists.

Personal protective equipment

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

**Skin and body protection:** Wear neoprene, nitrile or PVA gloves 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:** Breathing apparatus needed only when aerosol or mist is formed. Observe respirator

assigned protection factors (APFs) criteria cited in federal OSHA 29 CFR 1910.134.

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

Physical State Liquid

Appearance Viscous, Translucent, Hazy, Clear to Amber Liquid

**Color** Clear or Amber

Odor Mild to Moderate Grainy
Odor Threshold No data available.

PropertyValues (Method)Melting Point / Freezing Point18.2 °C / 64.8 °FInitial Boiling Point / Boiling Range290 °C / 554 °F

Flash Point 199 °C / 390 °F (Closed cup)

**Evaporation Rate** No data available.

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Flammability (solid, gas) Not applicable.

Flammability Limit in Air (%):

Upper Flammability Limit:
Lower Flammability Limit:
No data available.
No data available.
No data available.
No data available.
Vapor Pressure
Vapor Density
No data available.
3.1 (air=1)

Specific Gravity / Relative Density 1.26

Water Solubility
Solubility in other solvents
Partition Coefficient
Decomposition temperature

Miscible in water
No data available.
No data available.
289 °C / 552 °F

**pH:** 5.9-8.3

Autoignition Temperature

Kinematic Viscosity

Dynamic Viscosity

Explosive Properties

VOC Content (%)

Density

Autoignition Temperature

No data available.

# 10. STABILITY AND REACTIVITY

Reactivity The product is non-reactive under normal conditions.

<u>Chemical stability</u> The material is stable at 70°F (21°C), 760 mmHg pressure.

Possibility of hazardous reactions

None under normal processing.

Hazardous polymerization Will not occur.

<u>Conditions to avoid</u> Excessive heat, sources of ignition, open flame. Water

contamination during storage.

<u>Incompatible Materials</u> Strong oxidizing agents.

Hazardous decomposition products

None known under normal conditions of use.

# 11. TOXICOLOGICAL INFORMATION

## Potential short-term adverse effects from overexposures

**Inhalation** Excessive inhalation of mist may result in respiratory irritation. Overheating may produce

vapors which may cause respiratory irritation, dizziness and nausea.

**Eye contact** Produces little or no irritation on direct contact with the eye.

**Skin contact** Prolonged and repeated contact may cause defatting and drying of the skin and may lead

to irritation and/or dermatitis.

**Ingestion** Ingestion of large amounts may cause gastrointestinal disturbances.

# Acute toxicological data

| Name                      | Oral LD50           | Dermal LD50            | Inhalation LC50       |
|---------------------------|---------------------|------------------------|-----------------------|
| Glycerine                 | >10,000 mg/kg (Rat) | >10,000 mg/kg (Rabbit) | > 570 mg/m³ (Rat) 1 h |
| 56-81-5                   |                     |                        |                       |
| Sodium Chloride           | 3000 mg/kg (Rat)    | >2000 mg/kg (Mouse)    | > 42 g/m³ (Rat) 1 h   |
| 7647-14-5                 |                     |                        |                       |
| Fatty Acids               | -                   | -                      | -                     |
| 68308-53-2                |                     |                        |                       |
| Methanol (Methyl Alcohol) | >2000 mg/kg (Rat)   | >5000 mg/kg (Rabbit)   | >40 mg/L (Rat) 4 h    |

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| 67-56-1 |  |  |
|---------|--|--|

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

Not expected to be acutely toxic. No long-term effects known.

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

Signs and Symptoms Repeated or prolonged skin contact may cause drying, reddening, itching and cracking.

**Sensitization** Not expected to be a skin or respiratory sensitizer.

Mutagenic effects

None known.

Carcinogenicity

None known.

Cancer designations are listed in the table below

| Name                                 | ACGIH<br>(Class) | IARC<br>(Class) | NTP        | OSHA       |
|--------------------------------------|------------------|-----------------|------------|------------|
| Glycerine<br>56-81-5                 | Not Listed       | Not Listed      | Not Listed | Not Listed |
| Sodium Chloride<br>7647-14-5         | Not Listed       | Not Listed      | Not Listed | Not Listed |
| Fatty Acids<br>68308-53-2            | Not Listed       | Not Listed      | Not Listed | Not Listed |
| Methanol (Methyl Alcohol)<br>67-56-1 | Not Listed       | Not Listed      | Not Listed | Not Listed |

**Reproductive toxicity** None known.

Specific Target Organ Toxicity (STOT) - single exposure

Not classified.

Specific Target Organ Toxicity (STOT) - repeated exposure

Not classified.

**Aspiration hazard** No data available.

# 12. ECOLOGICAL INFORMATION

**Ecotoxicity** This product is not expected to be harmful to aquatic organisms.

| Name                                 | Algae/aquatic plants | Fish  | Toxicity to Microorganisms | Crustacea                                |
|--------------------------------------|----------------------|---|----------------------------|--|
| Glycerine<br>56-81-5                 | -                    | 96-hr LC50 >10,000 mg/l<br>Rainbow trout (static)                                     | -                          | 24-hr EC50 >10,000 mg/l<br>Daphnia magna |
| Sodium Chloride<br>7647-14-5         | -                    | 96-hr LC50 > 1,000 mg/l<br>Fathead minnow<br>96-hr LC50 > 1,000 mg/l<br>Rainbow trout | -                          | 48-hr EC50 >100 mg/l<br>Daphnia magna    |
| Fatty Acids 68308-53-2               | -                    | -   | -                          | -  |
| Methanol (Methyl Alcohol)<br>67-56-1 | -                    | 96-hr LC50 > 100 mg/l<br>Fathead minnow<br>96-hr LC50 > 10,000 mg/l<br>Rainbow trout  | -                          | 48-hr EC50 >10,000 mg/l<br>Daphnia magna |

**Persistence and degradability** Readily biodegradable in the environment.

**Bioaccumulation** Not expected to bioaccumulate in aquatic organisms.

Mobility in soil Considered to have high mobility in soil based on glycerine content.

Other adverse effects No information available.

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# 13. DISPOSAL CONSIDERATIONS

#### **Description of Waste Residues**

Long-term storage may result in decomposition of the product.

## Safe Handling of Wastes

Handle in accordance with applicable local, state, and federal regulations. Use personal protection measures as required.

#### **Disposal of Wastes / Methods of Disposal**

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.

## **Methods of Contaminated Packaging Disposal**

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 (49 CFR 172.101):

UN Proper Shipping Name:
UN/Identification No:
Class:
Packing Group:
Not Regulated
Not applicable
Not applicable.
Not applicable.

TDG (Canada):

UN Proper Shipping Name:
UN/Identification No:
Not applicable.
Transport Hazard Class(es):
Not applicable.
Packing Group:
Not applicable.

# 15. REGULATORY INFORMATION

## **US Federal Regulatory Information:**

US TSCA Chemical Inventory Section 8(b): This product and/or its components are listed on the TSCA

Chemical Inventory.

# EPA Superfund Amendment & Reauthorization Act (SARA):

SARA Section 302: This product does not contain any component(s) included on EPA's Extremely Hazardous Substance (EHS) List.

| Name                      | CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs |
|---------------------------|---|
| Glycerine                 | NA  |
| Sodium Chloride           | NA  |
| Fatty Acids               | NA  |
| Methanol (Methyl Alcohol) | NA  |

SARA Section 304: This product may contain component(s) identified either as an EHS or a CERCLA

Hazardous substance which in case of a spill or release may be subject to SARA reporting

requirements:

| Name                      | Hazardous Substances RQs |
|---------------------------|--------------------------|
| Glycerine                 | NA                       |
| Sodium Chloride           | NA                       |
| Fatty Acids               | NA                       |
| Methanol (Methyl Alcohol) | 5000                     |

SARA Section 311/312: The following EPA hazard categories apply to this product:

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#### Acute Health 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).

| Name                      | CERCLA/SARA 313 Emission reporting: |
|---------------------------|-------------------------------------|
| Glycerine                 | None                                |
| Sodium Chloride           | None                                |
| Fatty Acids               | None                                |
| Methanol (Methyl Alcohol) | 1.0 % de minimis concentration      |

#### State and Community Right-To-Know Regulations:

The following component(s) of this material are identified on the regulatory lists below:

| $\sim$ |         |
|--------|---------|
| 121    | /COLINO |
| (11)   | /cerine |
|        |         |

Louisiana Right-To-Know:Not ListedCalifornia Proposition 65:Not ListedNew Jersey Right-To-Know:SN 3319Pennsylvania Right-To-Know:PresentMassachusetts Right-To Know:Present (mist)Florida Substance List:Not Listed

Rhode Island Right-To-Know: Toxic (mist); Flammable (mist)

Michigan Critical Materials Register List:

Massachusetts Extraordinarily Hazardous Substances:
California - Regulated Carcinogens:
Not Listed
Pennsylvania RTK - Special Hazardous
Not Listed

Substances:

New Jersey - Special Hazardous Substances: Not Listed New Jersey - Environmental Hazardous Not Listed

Substances List:

Illinois - Toxic Air Contaminants: Not Listed
New York - Reporting of Releases Part 597 - Not Listed

List of Hazardous Substances:

#### Sodium Chloride

Louisiana Right-To-Know: Not Listed California Proposition 65: Not Listed New Jersey Right-To-Know: Not Listed Pennsylvania Right-To-Know: Not Listed Massachusetts Right-To Know: Not Listed Florida Substance List: Not Listed Rhode Island Right-To-Know: Not Listed Michigan Critical Materials Register List: Not Listed Massachusetts Extraordinarily Hazardous Substances: Not Listed California - Regulated Carcinogens: Not Listed Pennsylvania RTK - Special Hazardous Not Listed Substances:

New Jersey - Special Hazardous Substances:

Not Listed
New Jersey - Environmental Hazardous

Not Listed

Substances List:

Illinois - Toxic Air Contaminants: Not Listed New York - Reporting of Releases Part 597 - Not Listed

List of Hazardous Substances:

# Fatty Acids

Louisiana Right-To-Know: Not Listed California Proposition 65: Not Listed New Jersey Right-To-Know: Not Listed Pennsylvania Right-To-Know: Not Listed Massachusetts Right-To Know: Not Listed Florida Substance List: Not Listed Rhode Island Right-To-Know: Not Listed Michigan Critical Materials Register List: Not Listed

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Massachusetts Extraordinarily Hazardous Substances:
California - Regulated Carcinogens:
Pennsylvania RTK - Special Hazardous
Not Listed
Not Listed

Substances:

New Jersey - Special Hazardous Substances: Not Listed New Jersey - Environmental Hazardous Not Listed

Substances List:

Illinois - Toxic Air Contaminants: Not Listed
New York - Reporting of Releases Part 597 - Not Listed

List of Hazardous Substances:

Methanol (Methyl Alcohol)

Louisiana Right-To-Know: Not Listed

California Proposition 65: Developmental toxicity, initial date 3/16/12

New Jersey Right-To-Know: SN 1222

Pennsylvania Right-To-Know: Environmental hazard

Massachusetts Right-To Know:

Florida Substance List:

Rhode Island Right-To-Know:

Michigan Critical Materials Register List:

Massachusetts Extraordinarily Hazardous Substances:

California - Regulated Carcinogens:

Pennsylvania RTK - Special Hazardous

Present

Not Listed

Not Listed

Not Listed

Not Listed

Not Listed

Substances:

New Jersey - Special Hazardous Substances: Flammable - third degree; teratogen

New Jersey - Environmental Hazardous SN 1222 TPQ: 500 lb

Substances List:

Illinois - Toxic Air Contaminants: Present

New York - Reporting of Releases Part 597 - 5000 lb RQ (air); 1 lb RQ (land/water)

List of Hazardous Substances:

Canada DSL/NDSL Inventory: This product and/or its components are listed either on the Domestic Substances List (DSL)

or are exempt.

Canadian Regulatory Information: This product has been classified in accordance with the hazard criteria of the Controlled

Products Regulations and the SDS contains all of the information required by those

regulations.

| Name                      | Canada - WHMIS: Classifications of Substances:                  | Canada - WHMIS: Ingredient Disclosure: |
|---------------------------|---|--|
| Glycerine                 | Uncontrolled product according to WHMIS classification criteria | -                                      |
| Sodium Chloride           | Uncontrolled product according to WHMIS classification criteria | -                                      |
| Fatty Acids               | Uncontrolled product according to WHMIS classification criteria | -                                      |
| Methanol (Methyl Alcohol) | B2.D1B.D2A.D2B  | 0.1%                                   |

Note: Not applicable.

# **16. OTHER INFORMATION**

Prepared By Toxicology and Product Safety

**Revision Notes** 

Revision Date 07/22/2016 Previous Publish Date 07/22/2016

**Revised Sections** The following sections (§) have been updated:

3. COMPOSITION/INFORMATION ON INGREDIENTS

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# **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.

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