# SAFETY DATA SHEET

## CLD - Mid Flash

Version 2.1

Revision Date 2018-06-04

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### Product information

<table>
<thead>
<tr>
<th>Product Name</th>
<th>CLD - Mid Flash</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>1104353, 1104354, 1104451</td>
</tr>
</tbody>
</table>

#### Company

Chevron Phillips Chemical Company LP  
Specialty Chemicals  
10001 Six Pines Drive  
The Woodlands, TX 77380

#### Emergency telephone:

**Health:**  
866.442.9628 (North America)  
1.832.813.4984 (International)

**Transport:**  
CHEMTREC 800.424.9300 or 703.527.3887(int'l)  
Asia: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090  
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
Mexico CHEMTREC 01-800-681-9531 (24 hours)  
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600  
Argentina: +(54)-1159839431

#### Responsible Department

Product Safety and Toxicology Group

#### E-mail address

SDS@CPChem.com

#### Website

www.CPChem.com

### SECTION 2: Hazards identification

**Classification of the substance or mixture**

This product has been classified in accordance with the hazard communication standard 29 CFR 1910.1200; the SDS and labels contain all the information as required by the standard.

#### Classification

- Flammable liquids, Category 3  
- Specific target organ systemic toxicity - single exposure, Category 3  
- Central nervous system  
- Aspiration hazard, Category 1

#### Labeling

SDS Number: 100000068055  
1/13
Symbol(s): Danger

Signal Word: Danger

Hazard Statements:
- H226: Flammable liquid and vapor.
- H304: May be fatal if swallowed and enters airways.
- H336: May cause drowsiness or dizziness.

Precautionary Statements:

Prevention:
- P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- P240: Ground/bond container and receiving equipment.
- P241: Use explosion-proof electrical/ventilating/lighting/equipment.
- P242: Use only non-sparkling tools.
- P243: Take precautionary measures against static discharge.
- P264: Wash hands thoroughly after handling.
- P280: Wear protective gloves/eye protection/face protection.

Response:
- P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.
- P331: Do NOT induce vomiting.
- P370 + P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:
- P403 + P233: Store in a well-ventilated place. Keep container tightly closed.
- P403 + P235: Store in a well-ventilated place. Keep cool.
- P405: Store locked up.

Disposal:
- P501: Dispose of contents/container to an approved waste disposal plant.

Carcinogenicity:

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

ACGIH: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

SECTION 3: Composition/information on ingredients

Synonyms:
- Charcoal Lighter Distillate Mid Flash
- Isoparaffins
- Aliphatic hydrocarbon
- Isoalkanes

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CLD - Mid Flash

SAFETY DATA SHEET

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<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Weight %</th>
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<tbody>
<tr>
<td>C9-C11 Isoalkanes</td>
<td>68551-16-6</td>
<td>100</td>
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</tbody>
</table>

SECTION 4: First aid measures

General advice: Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Material may produce a serious, potentially fatal pneumonia if swallowed or vomited.

If inhaled: If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.

In case of skin contact: If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact: Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

If swallowed: Keep respiratory tract clear. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

SECTION 5: Firefighting measures

Flash point: 48 °C (118 °F)
Method: Tag closed cup

Autoignition temperature: 336 °C (637 °F)

Suitable extinguishing media: Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical.

Unsuitable extinguishing media: High volume water jet.

Specific hazards during firefighting: Do not allow run-off from fire fighting to enter drains or water courses.

Special protective equipment for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary.

Further information: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.

Fire and explosion protection: Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Keep away from open flames, hot surfaces and sources of
Hazardous decomposition products: Carbon Dioxide. Carbon oxides.

SECTION 6: Accidental release measures

Personal precautions: Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7: Handling and storage

Handling

Advice on safe handling: Avoid formation of aerosol. Do not breathe vapors/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion: Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Keep away from open flames, hot surfaces and sources of ignition.

Storage

Requirements for storage areas and containers: No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

SECTION 8: Exposure controls/personal protection

Chevron Phillips Chemical Company LP

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Basis</th>
<th>Value</th>
<th>Control parameters</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>C9-C11 Isoalkanes</td>
<td>Manufacturer</td>
<td>TWA</td>
<td>1,200 mg/m3</td>
<td>RCP.</td>
</tr>
</tbody>
</table>

Engineering measures

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Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

**Personal protective equipment**

**Respiratory protection**: Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as: Air-Purifying Respirator for Organic Vapors, Dusts and Mists. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.

**Hand protection**: The suitability for a specific workplace should be discussed with the producers of the protective gloves. For prolonged or repeated contact use 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, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

**Eye protection**: Eye wash bottle with pure water. Tightly fitting safety goggles.

**Skin and body protection**: Impervious clothing. Wear as appropriate: Choose body protection according to the amount and concentration of the dangerous substance at the work place. Workers should wear antistatic footwear.

**Hygiene measures**: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

**SECTION 9: Physical and chemical properties**

**Information on basic physical and chemical properties**

**Appearance**

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
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<tbody>
<tr>
<td>Form</td>
<td>Liquid</td>
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<tr>
<td>Physical state</td>
<td>Liquid</td>
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<tr>
<td>Color</td>
<td>Colorless at room temperature</td>
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<tr>
<td>Odor</td>
<td>Mild, Hydrocarbon</td>
</tr>
</tbody>
</table>

**Safety data**

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>Flash point</td>
<td>48 °C (118 °F)</td>
</tr>
<tr>
<td>Method: Tag closed cup</td>
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</tr>
<tr>
<td>Lower explosion limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>No data available</td>
</tr>
</tbody>
</table>

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Oxidizing properties : no

Autoignition temperature : 336 °C (637 °F)

Molecular weight : Not applicable

pH : No data available

Freezing point : No data available

Pour point : No data available

Boiling point/boiling range : 178 - 188 °C (352 - 370 °F)

Vapor pressure : 1.00 MMHG
at 20 °C (68 °F)

Relative density : 0.76
at 15.6 °C (60.1 °F)

Density : 756.1 g/l

Water solubility : Negligible

Partition coefficient: n-octanol/water : No data available

Viscosity, kinematic : 1.12 cSt
at 38 °C (100 °F)

Relative vapor density : 3
(Air = 1.0)

Evaporation rate : 1

Percent volatile : > 99 %

**SECTION 10: Stability and reactivity**

Chemical stability : This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Possibility of hazardous reactions**

Conditions to avoid : Heat, sparks, fire, and oxidizing agents.

Materials to avoid : May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Hazardous decomposition products : Carbon Dioxide
Carbon oxides
SECTION 11: Toxicological information

**Acute oral toxicity**
C9-C11 Isoalkanes: LD50: > 5,000 mg/kg
Species: Rat
Sex: male and female
Method: OECD Test Guideline 401
Information given is based on data obtained from similar substances.

**Acute inhalation toxicity**
C9-C11 Isoalkanes: LC50: > 4.9 mg/l
Exposure time: 4 h
Species: Rat
Sex: male and female
Test atmosphere: vapor
Method: OECD Test Guideline 403
An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration.
Information given is based on data obtained from similar substances.

**Acute dermal toxicity**
C9-C11 Isoalkanes: LD50: > 5,000 mg/kg
Species: Rabbit
Sex: male and female
Method: OECD Test Guideline 402
Information given is based on data obtained from similar substances.

**CLD - Mid Flash Skin irritation**
May cause skin irritation and/or dermatitis.

**CLD - Mid Flash Eye irritation**
No eye irritation.
Vapors may cause irritation to the eyes, respiratory system and the skin.

**Sensitization**
C9-C11 Isoalkanes: Not a skin sensitizer.
Information given is based on data obtained from similar substances.

**Repeated dose toxicity**
C9-C11 Isoalkanes: Species: Rat, male and female
Sex: male and female
Application Route: Inhalation
Dose: 0, 2600, 5200, 10400 mg/3
Exposure time: 13 wk
Number of exposures: 6 h/d, 5 d/wk  
NOEL: > 10,400 mg/m³  
Method: OECD Test Guideline 413  
No significant adverse effects were reported  
Information given is based on data obtained from similar substances.

### Developmental Toxicity

**C9-C11 Isoalkanes**  
Species: Rat  
Application Route: Inhalation  
Dose: 0, 291, 817 ppm  
Number of exposures: 6 h/d  
Test period: GD 6-15  
NOAEL Teratogenicity: > 817 ppm  
NOAEL Maternal: > 817 ppm

### Aspiration toxicity

**CLD - Mid Flash**  
May be fatal if swallowed and enters airways.  
Substances known to cause human aspiration toxicity hazards or to be regarded as if they cause human aspiration toxicity hazard.

### Further information

Solvents may degrease the skin.

### Ecological information

#### Toxicity to fish

**C9-C11 Isoalkanes**  
LL50: 3.6 mg/l  
Exposure time: 96 h  
Species: Oncorhynchus mykiss (rainbow trout)  
semi-static test  
Method: OECD Test Guideline 203  
Information given is based on data obtained from similar substances.

#### Toxicity to daphnia and other aquatic invertebrates

**C9-C11 Isoalkanes**  
EL50: 22 - 46 mg/l  
Exposure time: 48 h  
Species: Daphnia magna (Water flea)  
static test  
Method: OECD Test Guideline 202  
Information given is based on data obtained from similar substances.

#### Toxicity to algae

**C9-C11 Isoalkanes**  
ErL50: > 1,000 mg/l  
Exposure time: 72 h  
Species: Pseudokirchneriella subcapitata (algae)  
static test  
Method: OECD Test Guideline 201
Toxicity to fish (Chronic toxicity)

C9-C11 Isoalkanes : NOELR: 0.132 mg/l
Species: Oncorhynchus mykiss (rainbow trout)
Method: QSAR modeled data

Elimination information (persistence and degradability)

Biodegradability : Expected to be biodegradable

Ecotoxicology Assessment

Acute aquatic toxicity
C9-C11 Isoalkanes : Toxic to aquatic life.

Chronic aquatic toxicity
C9-C11 Isoalkanes : Toxic to aquatic life with long lasting effects.

Additional ecological information : No data available

SECTION 13: Disposal considerations

The information in this SDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Product : Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: Transport information

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.). Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)
UN3295, HYDROCARBONS, LIQUID, N.O.S., 3, III

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)
UN3295, HYDROCARBONS, LIQUID, N.O.S., 3, III, (48 °C), MARINE POLLUTANT, (ISOALKANES (C9-C11))

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)
UN3295, HYDROCARBONS, LIQUID, N.O.S., 3, III

ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))
UN3295, HYDROCARBONS, LIQUID, N.O.S., 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS, (ISOALKANES (C9-C11))

RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))
UN3295, HYDROCARBONS, LIQUID, N.O.S., 3, III, ENVIRONMENTALLY HAZARDOUS, (ISOALKANES (C9-C11))

ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)
UN3295, HYDROCARBONS, LIQUID, N.O.S., 3, III, ENVIRONMENTALLY HAZARDOUS, (ISOALKANES (C9-C11))

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

National legislation

SARA 311/312 Hazards: Flammable (gases, aerosols, liquids, or solids)
Specific target organ toxicity (single or repeated exposure)
Aspiration hazard

CERCLA Reportable Quantity: This material does not contain any components with a CERCLA RQ.

SARA 302 Reportable Quantity: This material does not contain any components with a SARA 302 RQ.

SARA 302 Threshold Planning Quantity: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 304 Reportable Quantity: This material does not contain any components with a section 304 EHS RQ.
**SARA 313 Ingredients**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**Clean Air Act**

Ozone-Depletion Potential: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

**US State Regulations**

Pennsylvania Right To Know: No components are subject to the Pennsylvania Right to Know Act.

New Jersey Right To Know: No components are subject to the New Jersey Right to Know Act.

California Prop. 65 Ingredients: This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

**Notification status**

Europe REACH: Not in compliance with the inventory

United States of America (USA) TSCA: On TSCA Inventory

Canada DSL: All components of this product are on the Canadian DSL

Australia AICS: On the inventory, or in compliance with the inventory

New Zealand NZIoC: This substance may be used as a component in a product covered by a group standard but it is not approved for use as a chemical in its own right

Japan ENCS: On the inventory, or in compliance with the inventory
SECTION 16: Other information

**NFPA Classification**
- Health Hazard: 1
- Fire Hazard: 2
- Reactivity Hazard: 0

**Further information**

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.

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.

<table>
<thead>
<tr>
<th>Key or legend to abbreviations and acronyms used in the safety data sheet</th>
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<tbody>
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<td>ACGIH</td>
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<td>LD50</td>
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SDS Number: 100000068055
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<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ENCS</td>
<td>Japan, Inventory of Existing and New Chemical Substances</td>
<td>TSCA</td>
<td>Toxic Substance Control Act</td>
</tr>
<tr>
<td>KECI</td>
<td>Korea, Existing Chemical Inventory</td>
<td>UVCB</td>
<td>Unknown or Variable Composition, Complex Reaction Products, and Biological Materials</td>
</tr>
<tr>
<td>&lt;=</td>
<td>Less Than or Equal To</td>
<td>WHMIS</td>
<td>Workplace Hazardous Materials Information System</td>
</tr>
<tr>
<td>LC50</td>
<td>Lethal Concentration 50%</td>
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