

# SAFETY DATA SHEET

## CALFLO™/MC SYNTHETIC



000003000283

Version 2.3

Revision Date 2021/02/17

Print Date 2021/02/17

### SECTION 1. IDENTIFICATION

Product name : CALFLO™/MC SYNTHETIC  
Product code : CALSYNAC4U, CALSYNAP20, CALSYNAIBC, CALSYNA,  
CALSYNADRM

#### Manufacturer or supplier's details

Petro-Canada America Lubricants LLC  
115N Oak Park Avenue #1C  
Oak Park IL 60301-1366  
United States  
Telephone : +1 888-284-4572

#### Emergency telephone number

Emergency telephone number : CHEMTREC: 1-800-424-9300;  
Poison Control Centre: Consult local telephone directory for  
emergency number(s).

#### Recommended use of the chemical and restrictions on use

Recommended use : CALFLO SYNTHETIC is a heat transfer fluid recommended  
for non-pressurized, liquid-phase, closed heat transfer systems  
in low temperature start-up applications.

Prepared by : Product Safety: +1 905-491-0565

### SECTION 2. HAZARDS IDENTIFICATION

#### GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity (Inhalation) : Category 4

Aspiration hazard : Category 1

#### GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : May be fatal if swallowed and enters airways.  
Harmful if inhaled.

Precautionary statements : **Prevention:**  
Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
Use only outdoors or in a well-ventilated area.  
**Response:**  
IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
IF INHALED: Remove person to fresh air and keep comfortable  
for breathing. Call a POISON CENTER/ doctor if you feel un-  
well.

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Do NOT induce vomiting.

**Storage:**

Store locked up.

**Disposal:**

Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

None known.

**IARC**

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

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**NTP**

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

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

**Components**

| Chemical name                 | CAS-No.    | Concentration (% w/w) |
|-------------------------------|------------|-----------------------|
| 1-Decene, dimer, hydrogenated | 68649-11-6 | 90 - 100              |

Actual concentration is withheld as a trade secret

### SECTION 4. FIRST AID MEASURES

- If inhaled : Move to fresh air.  
Artificial respiration and/or oxygen may be necessary.  
Seek medical advice.
- In case of skin contact : In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.  
Wash skin thoroughly with soap and water or use recognized skin cleanser.  
Wash contaminated clothing before reuse.  
Seek medical advice.
- In case of eye contact : Remove contact lenses.  
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Obtain medical attention.
- If swallowed : Rinse mouth with water.  
DO NOT induce vomiting unless directed to do so by a physician or poison control center.  
Never give anything by mouth to an unconscious person.  
Seek medical advice.

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Most important symptoms and effects, both acute and delayed : First aider needs to protect himself.

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### SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : No information available.
- Specific hazards during fire-fighting : Cool closed containers exposed to fire with water spray.
- Hazardous combustion products : Carbon oxides (CO, CO<sub>2</sub>), silicon oxides (SiO<sub>x</sub>), formaldehyde, smoke and irritating vapours as products of incomplete combustion.
- Further information : Prevent fire extinguishing water from contaminating surface water or the ground water system.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.  
Wear a positive-pressure supplied-air respirator with full face-piece.

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### SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Ensure adequate ventilation.  
Evacuate personnel to safe areas.  
Material can create slippery conditions.  
Mark the contaminated area with signs and prevent access to unauthorized personnel.  
Only qualified personnel equipped with suitable protective equipment may intervene.
- Environmental precautions : If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Prevent further leakage or spillage if safe to do so.  
Remove all sources of ignition.  
Soak up with inert absorbent material.  
Non-sparking tools should be used.  
Ensure adequate ventilation.  
Contact the proper local authorities.

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### SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : None known.

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- Advice on safe handling : For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Do not ingest.  
Avoid contact with skin, eyes and clothing.  
In case of insufficient ventilation, wear suitable respiratory equipment.  
Keep away from heat and sources of ignition.  
Keep container closed when not in use.
- Conditions for safe storage : Store in original container.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Keep in a dry, cool and well-ventilated place.  
Keep in properly labelled containers.  
To maintain product quality, do not store in heat or direct sunlight.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

- Engineering measures : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

#### Personal protective equipment

- Respiratory protection : 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.

- Filter type : organic vapour filter

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

#### Hand protection

- Material : neoprene, nitrile, polyvinyl alcohol (PVA), Viton(R).

- Remarks : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

- Eye protection : Wear face-shield and protective suit for abnormal processing problems.

- Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

- Protective measures : Wash contaminated clothing before re-use.

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Hygiene measures : Remove and wash contaminated clothing and gloves, including the inside, before re-use.  
Wash face, hands and any exposed skin thoroughly after handling.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Light viscosity liquid

Colour : Colourless to light yellow.

Odour : Mild petroleum oil like.

Odour Threshold : No data available

pH : No data available

Pour point : < -51 °C (-60 °F)

Boiling point/boiling range : approximately 329 °C (624 °F)

Flash point : 144 °C (291 °F)  
Method: Pensky-Martens closed cup

Evaporation rate : No data available

Flammability : Remarks: Low fire hazard. This material must be heated before ignition will occur.

Auto-Ignition Temperature : 608 °F / 320 °C

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available

Relative density : No data available

Density : 0.7992 kg/l (59 °F / 15 °C)

Solubility(ies)  
Water solubility : insoluble

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

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|                      |   |  |
|----------------------|---|--|
| Viscosity            |   |  |
| Viscosity, kinematic | : | 5.3 cSt (40 °C / 104 °F)   |
|                      |   | 1.8 cSt (100 °C / 212 °F)  |
| Explosive properties | : | Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. |

### SECTION 10. STABILITY AND REACTIVITY

|                                    |   |  |
|------------------------------------|---|--|
| Possibility of hazardous reactions | : | Hazardous polymerisation does not occur.<br>Stable under normal conditions.  |
| Conditions to avoid                | : | No data available  |
| Incompatible materials             | : | Reactive with oxidising agents, acids, alkalis, halogens and halogenated compounds.  |
| Hazardous decomposition products   | : | May release CO <sub>x</sub> , NO <sub>x</sub> , aldehydes, methacrylate monomers, smoke and irritating vapours when heated to decomposition. |

### SECTION 11. TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects

|  |   |  |
|--|---|--|
| Information on likely routes of exposure | : | Eye contact<br>Ingestion<br>Inhalation<br>Skin contact |
|--|---|--|

#### Acute toxicity

##### Product:

|                           |   |                            |
|---------------------------|---|----------------------------|
| Acute oral toxicity       | : | Remarks: No data available |
| Acute inhalation toxicity | : | Remarks: No data available |
| Acute dermal toxicity     | : | Remarks: No data available |

##### Components:

##### **1-Decene, dimer, hydrogenated:**

|                           |   |   |
|---------------------------|---|---|
| Acute inhalation toxicity | : | LC50 (Rat): 1.17 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist |
|---------------------------|---|---|

#### Skin corrosion/irritation

##### Product:

|         |   |                   |
|---------|---|-------------------|
| Remarks | : | No data available |
|---------|---|-------------------|

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### Serious eye damage/eye irritation

**Product:**

Remarks : No data available

### Respiratory or skin sensitisation

No data available

### Germ cell mutagenicity

No data available

### Carcinogenicity

No data available

### Reproductive toxicity

No data available

### STOT - single exposure

No data available

### STOT - repeated exposure

No data available

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## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

**Product:**

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae/aquatic plants : Remarks: No data available

Toxicity to microorganisms : Remarks: No data available

### Persistence and degradability

**Product:**

Biodegradability : Remarks: No data available

### Bioaccumulative potential

No data available

### Mobility in soil

No data available

### Other adverse effects

No data available

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### SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.  
Offer surplus and non-recyclable solutions to a licensed disposal company.  
Waste must be classified and labelled prior to recycling or disposal.  
Send to a licensed waste management company.  
Dispose of product residue in accordance with the instructions of the person responsible for waste disposal.

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### SECTION 14. TRANSPORT INFORMATION

#### International Regulations

##### IATA-DGR

Not regulated as a dangerous good

##### IMDG-Code

Not regulated as a dangerous good

#### National Regulations

##### 49 CFR

Not regulated as a dangerous good

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### SECTION 15. REGULATORY INFORMATION

#### California Prop. 65

ethyl acrylate

This product contains chemical(s) known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov). The chemicals include:  
140-88-5

#### The components of this product are reported in the following inventories:

DSL : On the inventory, or in compliance with the inventory

TSCA : All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

IECSC : On the inventory, or in compliance with the inventory

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### SECTION 16. OTHER INFORMATION

#### Further information



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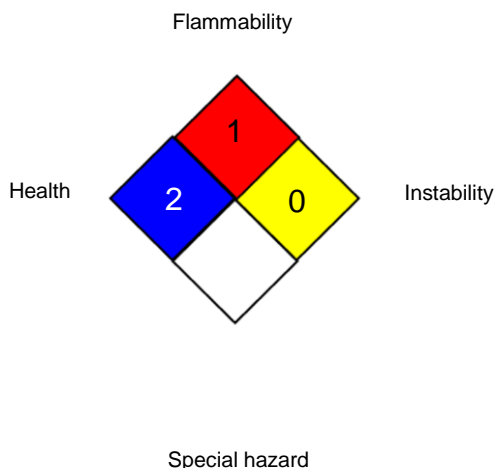
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### NFPA 704:



### HMIS® IV:

|                 |  |   |
|-----------------|--|---|
| HEALTH          |  | 3 |
| FLAMMABILITY    |  | 1 |
| PHYSICAL HAZARD |  | 0 |

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

### Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); Ecx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; Elx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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For Copy of SDS : Internet: [lubricants.petro-canada.com/sds](http://lubricants.petro-canada.com/sds)  
United States, telephone: 1-800-268-5850; fax: 1-800-201-6285  
For Product Safety Information: 1 905-491-0565

Prepared by : Product Safety: +1 905-491-0565

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Date format : yyyy/mm/dd

The information is considered as correct, but not exhaustive, and will be used only as a guide, which is based in the current knowledge of the substance or mixture, and is applicable to proper safety precautions for the product.

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.

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