

# Material Safety Data Sheet

## REFLO™/MC 68A



000003000940

Version 2.0

Revision Date 2014/09/15

Print Date 2014/09/15

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : REFLO™/MC 68A

Product code : REFL68AP20, REFL68AIBC, REFL68ADRM, REFL68A, REFL68ABLK

Manufacturer or supplier's details

Petro-Canada Lubricants Inc.  
2310 Lakeshore Road West  
Mississauga ON L5J 1K2  
Canada

Petro-Canada America Lubricants Inc.  
115N Oak Park Avenue #1C  
Oak Park IL 60301-1366  
United States

Emergency telephone number : Suncor Energy: +1 403-296-3000;  
Poison Control Centre: Consult local telephone directory for emergency number(s).

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

Recommended use : This product is designed for use in refrigeration compressors containing ammonia gas.

Prepared by : Product Safety: +1 905-804-4752

### SECTION 2. HAZARDS IDENTIFICATION

#### Emergency Overview

Form	viscous liquid
Colour	Clear, slightly yellow.
Odour	Hydrocarbon.

#### Potential Health Effects

Primary Routes of Entry : Eye contact  
Ingestion  
Inhalation  
Skin contact

Aggravated Medical Condition : None known.

#### Carcinogenicity:

##### 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

# Material Safety Data Sheet

REFLO™/MC 68A

000003000940



Version 2.0

Revision Date 2014/09/15

Print Date 2014/09/15

<b>NTP</b>	equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. 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.
<b>ACGIH</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

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## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

### Hazardous components

No hazardous ingredients

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## 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 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.
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.

# Material Safety Data Sheet

REFLO™/MC 68A

000003000940



Version 2.0

Revision Date 2014/09/15

Print Date 2014/09/15

---

- Unsuitable extinguishing media : No information available.
- Specific hazards during firefighting : Cool closed containers exposed to fire with water spray.
- Hazardous combustion products : Carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), sulphur oxides (SO<sub>x</sub>), hydrocarbons, smoke and irritating vapours as products of incomplete combustion.
- Specific extinguishing methods : Prevent fire extinguishing water from contaminating surface water or the ground water system.
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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.
- 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 safe handling : For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
In case of insufficient ventilation, wear suitable respiratory equipment.  
Avoid contact with skin, eyes and clothing.  
Do not ingest.  
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.
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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# Material Safety Data Sheet

## REFLO™/MC 68A

000003000940



Version 2.0

Revision Date 2014/09/15

Print Date 2014/09/15

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### 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** : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. 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.  
Recommended Filter type:

**Filter type** : organic vapour filter

**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 hands and face before breaks and immediately after handling the product.  
Wash contaminated clothing before re-use.  
Ensure that eyewash station and safety shower are proximal to the work-station location.

**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.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** : viscous liquid

**Colour** : Clear, slightly yellow.

**Odour** : Hydrocarbon.

**Odour Threshold** : No data available

**pH** : No data available

# Material Safety Data Sheet

## REFLO™/MC 68A



000003000940

Version 2.0

Revision Date 2014/09/15

Print Date 2014/09/15

Pour point	: -42 °C (-44 °F)
Boiling point/boiling range	: 380 - 550 °C (716 - 1022 °F)
Flash point	: 236 °C (457 °F) Method: Cleveland open cup
Fire Point	: 260 °C (500 °F)
Auto-Ignition Temperature	: No data available
Evaporation rate	: No data available
Flammability	: Low fire hazard. This material must be heated before ignition will occur.
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Density	: 0.866 kg/l (15 °C / 59 °F)
Solubility(ies)	
Water solubility	: insoluble
Partition coefficient: n-octanol/water	: No data available
Viscosity	
Viscosity, kinematic	: 57.8 cSt (40 °C / 104 °F)  7.86 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.

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### SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reactions	: Hazardous polymerisation does not occur. Stable under normal conditions.  No dangerous reaction known under conditions of normal use.
Conditions to avoid	: No data available
Incompatible materials	: Reactive with oxidising agents and reducing agents.
Hazardous decomposition products	: May release COx, NOx, SOx, diphenylamine, hydrocarbons, smoke and irritating vapours when heated to decomposition.

# Material Safety Data Sheet

**REFLO™/MC 68A**

000003000940

Version 2.0

Revision Date 2014/09/15

Print Date 2014/09/15



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## SECTION 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

**Product:**

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

### Skin corrosion/irritation

**Product:**

Result: Mild skin irritation

### Serious eye damage/eye irritation

**Product:**

Result: Mild eye irritation

### 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

### Aspiration toxicity

No data available

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## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

**Product:**

Toxicity to fish : Remarks: No data available

# Material Safety Data Sheet

REFLO™/MC 68A



000003000940

Version 2.0

Revision Date 2014/09/15

Print Date 2014/09/15

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

## Persistence and degradability

### Product:

Biodegradability : Remarks: No data available

No data available

## Bioaccumulative potential

### Product:

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

## Mobility in soil

No data available

## Other adverse effects

No data available

### Product:

Additional ecological information : 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 as hazardous waste in compliance with local and national regulations.  
Dispose of product residue in accordance with the instructions of the person responsible for waste disposal.

Contaminated packaging : Do not re-use empty containers.

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## SECTION 14. TRANSPORT INFORMATION

### International Regulation

# Material Safety Data Sheet

**REFLO™/MC 68A**



000003000940

Version 2.0

Revision Date 2014/09/15

Print Date 2014/09/15

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**IATA-DGR**

Not regulated as a dangerous good

**IMDG-Code**

Not regulated as a dangerous good

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

Not applicable for product as supplied.

**49 CFR**

Not regulated as a dangerous good

**TDG**

Not regulated as a dangerous good

**Special precautions for user**

Not applicable

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## SECTION 15. REGULATORY INFORMATION

**OSHA Hazards** : This material is non-hazardous as defined by the American OSHA Hazard Communication Standard.  
**WHMIS Classification** : Not Rated

**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.  
**EINECS** On the inventory, or in compliance with the inventory

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## SECTION 16. OTHER INFORMATION



# Material Safety Data Sheet

## REFLO™/MC 68A

000003000940

Version 2.0

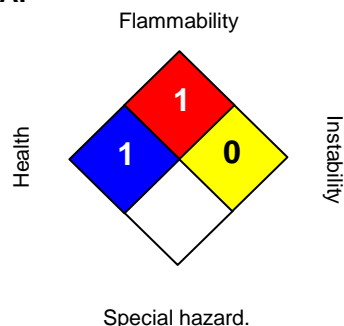
Revision Date 2014/09/15

Print Date 2014/09/15



### Further information

#### NFPA:



#### HMIS III:

<b>HEALTH</b>	<b>1</b>
<b>FLAMMABILITY</b>	<b>1</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>
<b>PERSONAL PROTECTION</b>	<b>B</b>

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

For Copy of (M)SDS

: The Canadian Controlled Products Regulations (CPR) (Under the Hazardous Products Act, part of the WHMIS legislation) only apply to WHMIS Controlled (i.e., hazardous) products. Therefore, the CPR and the 3-year update rule specified therein do not apply to WHMIS Non-Controlled products. Although this is true, customarily Petro-Canada reviews and updates Non-Controlled product MSDS if a customer requests such an update. These Non-Controlled product updates are given a lower priority than Controlled products but are handled as soon as practicable. If you would like to verify if the MSDS you have is the most current, or you require any further information, please contact:

Internet: [lubricants.petro-canada.ca/msds](http://lubricants.petro-canada.ca/msds)

Western Canada, telephone: 1-800-661-1199; fax: 1-800-378-4518

Ontario & Central Canada, telephone: 1-800-268-5850; fax: 1-800-201-6285

Quebec & Eastern Canada, telephone: 1-800-576-1686; fax: 1-800-201-6285

United States, telephone: 1-800-268-5850; fax: 1-800-201-6285

For Product Safety Information: 1 905-804-4752

Prepared by

: Product Safety: +1 905-804-4752

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.