



## 1. Chemical product and company identification

<b>Product name</b>	FLUOROCLEAN X-100
<b>MSDS #</b>	458448
<b>Historic MSDS #:</b>	27065-AM, BE-458448, CH-458448, NL-458448
<b>Code</b>	458448-US09
<b>Manufacturer</b>	Castrol Industrial North America, Inc. 150 W. Warrenville Road Naperville, IL 60563
<b>Supplier</b>	Castrol Industrial North America, Inc. 150 W. Warrenville Road Naperville, IL 60563 Product Information: 1-800-621-2661
<b>EMERGENCY SPILL INFORMATION:</b>	1 (800) 424-9300 CHEMTREC (USA)

## 2. Composition/information on ingredients

This product does not contain any hazardous ingredients at or above regulated thresholds.

## 3. Hazards identification

<b>Physical state</b>	Liquid.
<b>Color</b>	Clear. Colorless.
<b>Emergency overview</b>	CAUTION!  MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN IRRITATION. MAY CAUSE RESPIRATORY TRACT IRRITATION.  Avoid contact with eyes, skin and clothing. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling.
<b>Routes of entry</b>	Dermal contact. Eye contact. Inhalation. Ingestion.
<b>Potential health effects</b>	
<b>Eyes</b>	May cause eye irritation.
<b>Skin</b>	May cause skin irritation.
<b>Inhalation</b>	May cause respiratory tract irritation.
<b>Ingestion</b>	Ingestion may cause gastrointestinal irritation and diarrhea.
<b>Medical conditions aggravated by over-exposure</b>	None identified.

See toxicological Information (section 11).

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## 4. First aid measures

<b>Eye contact</b>	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops.
<b>Skin contact</b>	Immediately wash exposed skin with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if irritation develops.
<b>Ingestion</b>	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

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## 5. Fire-fighting measures

<b>Flammability of the product</b>	May be combustible at high temperature.
<b>Products of combustion</b>	These products are carbon oxides (CO, CO <sub>2</sub> ) (carbon monoxide, carbon dioxide), halogenated compounds, hydrogen fluoride.
<b>Unusual fire/explosion hazards</b>	Non-explosive in the presence of the following materials or conditions: open flames, sparks and static discharge and shocks and mechanical impacts.
<b>Fire-fighting media and instructions</b>	In case of fire, use water fog, foam, dry chemicals, or carbon dioxide.
<b>Protective clothing (fire)</b>	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

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## 6. Accidental release measures

<b>Personal precautions</b>	Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (See Section: "Exposure controls/personal protection"). Follow all fire fighting procedures (See Section: "Fire-fighting measures").
<b>Environmental precautions and clean-up methods</b>	If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Avoid contact of spilled material with soil and prevent runoff entering surface waterways. See Section 13 for Waste Disposal Information.
<b>Personal protection in case of a large spill</b>	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

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## 7. Handling and storage

<b>Handling</b>	Avoid contact with skin and clothing. Avoid contact with eyes. Use only with adequate ventilation. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable. Wash thoroughly after handling.
<b>Storage</b>	Keep container tightly closed. Keep container in a cool, well-ventilated area. Empty containers may contain harmful, flammable/combustible or explosive residue or vapors. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.

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## 8. Exposure controls/personal protection

### Occupational exposure limits

This product does not have any assigned OELs.

<b>Control Measures</b>	Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.
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		<b>Language</b> ENGLISH.
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## Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

## Personal protection

### Eyes

Avoid contact with eyes. Chemical splash goggles.

### Skin and body

Avoid contact with skin and clothing. Wear suitable protective clothing.

### Respiratory

Use only with adequate ventilation. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable.

### Hands

Wear suitable gloves.

Not available.



Consult local authorities for acceptable exposure limits.

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## 9. Physical and chemical properties

### Physical state

Liquid.

### Odor

Odorless.

### Color

Clear. Colorless.

### Heat of combustion

Not available.

### Specific gravity

1.6 to 1.8

### Vapor Density (Air = 1)

>1

### Volatility

100% (v/v)

### Evaporation rate

>1 compared to Butyl acetate.

### Solubility

insoluble in water.

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## 10. Stability and reactivity

### Stability and reactivity

The product is stable.

### Conditions to avoid

Not available.

### Incompatibility with various substances

Not available.

### Hazardous decomposition products

These products are halogenated compounds, hydrogen fluoride.

### Hazardous polymerization

Will not occur.

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## 11. Toxicological information

### Chronic toxicity

#### Carcinogenic effects

No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH or the International Agency for Research on Cancer (IARC). No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program (NTP) or the U.S. Occupational Safety and Health Act (OSHA).

#### Mutagenic effects

No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a mutagen.

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**Reproductive effects**

No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a reproductive toxin.

**Teratogenic effects**

No component of this product at levels greater than 0.1% is classified by established regulatory criteria as teratogenic or embryotoxic.

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## 12. Ecological information

**Ecotoxicity**

No testing has been performed by the manufacturer.

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## 13. Disposal considerations

**Waste information**

Avoid contact of spilled material and runoff with soil and surface waterways. Consult an environmental professional to determine if local, regional or national regulations would classify spilled or contaminated materials as hazardous waste. Use only approved transporters, recyclers, treatment, storage or disposal facilities. Dispose of in accordance with all applicable local and national regulations.

**Remarks**

No additional remark.

**Consult your local or regional authorities.**

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## 14. Transport information

Not classified as hazardous for transport (DOT, TDG, IMO/IMDG, IATA/ICAO)

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## 15. Regulatory information

**U.S. Federal regulations**

US INVENTORY (TSCA): In compliance.

This product is not regulated under Section 302 of SARA and 40 CFR Part 355.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: FLUOROCLEAN X-100: Immediate (Acute) Health Hazard

**SARA 313**

**Form R - Reporting requirements**

This product does not contain any hazardous ingredients at or above regulated thresholds.

**Supplier notification**

This product does not contain any hazardous ingredients at or above regulated thresholds.

CERCLA Sections 102a/103 Hazardous Substances (40 CFR Part 302.4):: This material is not regulated under CERCLA Sections 103 and 107.

**State regulations**

No products were found.

California Prop 65: No products were found

**Inventories**

AUSTRALIAN INVENTORY (AICS): In compliance.

CANADA INVENTORY (DSL): In compliance.

CHINA INVENTORY (IECS): In compliance.

EC INVENTORY (EINECS/ELINCS): In compliance.

JAPAN INVENTORY (ENCS): In compliance.

KOREA INVENTORY (ECL): In compliance.

PHILIPPINE INVENTORY (PICCS): In compliance.

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## 16. Other information

### Label requirements

CAUTION!

MAY CAUSE EYE IRRITATION.  
MAY CAUSE SKIN IRRITATION.  
MAY CAUSE RESPIRATORY TRACT IRRITATION.

### HMIS® Rating :

**Health** 1 - **National Fire Protection Association (U.S.A.)**  
**Flammability** 1  
**Physical Hazard** 0  
**Personal protection** B



### Other special considerations

A NFPA health hazard rating of "3" is assigned due to toxicity of thermal decomposition products and fluorine (HF); otherwise, the material itself warrants a health hazard rating of "1".

### History

#### Date of issue

09/13/2006.

#### Date of previous issue

05/08/2006.

#### Prepared by

Product Stewardship

### Notice to reader

*All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.*

*The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.*

*It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken.*

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