

Date of Revision: April 1, 2025

Section 1 - Chemical Product and Company Identification

Product Name CFR Ice Stop - Concentrate

Synonyms None.

Product Use Methanol Hydrate Inhibitor

Restriction on Use None identified Manufacturer/Supplier CFR Chemicals

38451 Range Road 22

County of Red Deer T4E 2N6

General Assistance 1 (877) 269-3419

Emergency Telephone 613-966-6666 (CANUTEC 24 Hour Phone Number)

Date of Preparation of SDS December 21, 2019

Section 2 - Hazard Identification

Signal Word GHS Pictogram(s)

Danger



Hazard Statement:

H225 Highly flammable liquid and vapour.

H301 +H311 +H331 Toxic if swallowed, in contact with skin or if inhaled.

H314 Causes severe skin burns and eye damage

H319 Causes serious eye irritation. H370 Causes damage to organs.

Precautionary Statement

Prevention

P210 Keep away from heat, hot surface, sparks, open flames and other ignition sources.

No smoking

P233 Keep Container tightly closed.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P242 Use non sparking tools.

P243 Take action to prevent static discharges.

P260 Do no breathe dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.

P301 + P330 + P331 IF SWALLOWED: Rinse Mouth. Do NOT induce vomiting.

P302 + P352 + P312 IF ON SKIN: Wash with plenty of water. Call a POISON CENTRE or doctor/physician

if you feel unwell.



Date of Revision: April 1, 2025

P303 + P361 + P353 IF ON SKIN (or hair) Take off immediately all contaminated clothing, rinse skin

with water (or shower).

P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call

a POISON CENTRE or doctor/physician.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P308 + P311 IF exposed or concerned: Call a POISON CENTRE or doctor/physician.

P321 Specific Treatment (see label)

P330 Rinse mouth.

P337 + P313 If eye irritation persists: Get medical advice/attention

P361 + P364 Take off immediately all contaminated clothing and wash it before reuse.

P370 + P378 In case of fire: use appropriate media to extinguish.

Storage

P235 Keep Cool.

P403 + P233 Store in well-ventilated place. Keep contained tightly closed.

P405 Store locked up.

Disposal

P501 Dispose of contents/container to an approved waste disposal unit.

GHS Classification Flammable liquids (Category 2)

Skin Corrosion (Category 1A)
Eye Irritation (Category 2A)
Acute Toxicity, Oral (Category 3)
Acute Toxicity, Inhalation (Category 3)
Acute Toxicity, Dermal (Category 3)

Specific target organ toxicity - single exposure (Category 1)

Potential Health Effects

Inhalation Toxic if inhaled. May cause respiratory tract irritation.

Skin Toxic if absorbed through skin. Causes severe skin burns and irritation.

Eye Causes eye irritation. **Ingestion** Toxic if swallowed.

Section 3 – Composition Information on Ingredients

HAZARDOUS INGREDIENT	Hazardous Ingredient, Synonyms	PERCENT	CAS NUMBER
Methanol	Methyl alcohol, wood alcohol, carbinol, wood spirits, methyl hydroxide, methyl hydrate	15 - 60%	67-56-1
Quaternary Ammonium Compounds	Not Applicable	5 - 50%	Not Available
Complex Amines	Not Applicable	5 - 50%	Not Available
	* = Various ** = Mixture *** = Proprietary		

Chemical Formula CH₄O



Date of Revision: April 1, 2025

Section 4 - First Aid Measures

Inhalation Move casualty to fresh air and keep warm and at rest.

Eye Contact In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice.

Skin Contact Wash with plenty of water and soap.

Ingestion Get medical attention immediately. Call a poison control center or physician.

Wash out mouth with water and give one half to one glass of water to dilute stomach contents. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as

collar, tie, belt or waistband.

Most Important Symptoms/Effects

Acute Poison. May be fatal if swallowed. If swallowed there is a risk of blindness. Toxic if

swallowed, in contact with skin or if inhaled. Ingestion causes nausea, weakness and central nervous system effects, headache, vomiting, dizziness, symptoms of drunkenness. Coma and death due to respiratory failure may follow severe exposures: Medical treatment necessary. A latent period of several hours may

occur between exposure and the onset of symptoms.

Delayed May damage fertility or the unborn child.

Note to Physician When plasma methanol concentration is higher than 20mg/dL, a 10% solution of

ethanol in 5% aqueous dextrose is an effective intravenous antidote.

Section 5 - Fire-Fighting Measures

Flash Point (°C) 14°C
Flash Point Method PMCC
Auto Ignition Temperature 464°C

Conditions of Flammability Flammable in the presence of a source of ignition when the temperature is above

the flash point. Keep away from heat/sparks/open flame/ hot surface. No

smoking.

Unsuitable Extinguising Media Water jet.

Unusual Fire/

Explosion Hazard Vapors may collect in low spots and "flash back" from ignition sources.

Lower explosive limit = 6%, upper explosive limit = 36.5%

Hazardous Combustion

Products Carbon oxides, nitrous oxides.

Special Protective Equipment and

Precautions for Firefighters Wear full firefighting gear and self-contained breathing apparatus (SCBA) for

protection against possible exposure..



Date of Revision: April 1, 2025

Section 6 – Accidental Release Measures

Personal precautionsUse personal protective equipment. Avoid breathing vapours, mist or gas. Ensure

adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe

areas. Beware of vapours accumulating to form explosive concentrations.

Vapours can accumulate in low areas.

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter

drains. Discharge into the environmentmust be avoided.

Methods and materials for containment and cleaning up

Contain free liquid if possible. Pick up by covering with an activated carbon absorbent or other suitable inert absorbent material (e.g. sand, sawdust, general-purpose binder). Take up & place in closed containers. Ventilate area & wash spill site after material pickup is complete. Contain and dispose of wash water in

accordance with local regulations.

Section 7 - Handling and Storage

Precautions for safe handling Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away

from sources of ignition - No smoking. Take measures to prevent the build-up of

electrostatic charge.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Incompatible Conditions

Heat, Flames, Sparks.

Incompatible Materials Oxidizing materials. Acids, Acid anhydrides, Acyl halides and Alkyl halides.

Attacks copper, aluminum, zinc, nickel and cast iron.

Section 8 – Exposure Controls / Personal Protection

Occupational Exposure Limits

Ingredient Name Exposure Limits

Methanol Canada, Alberta, Occupational Health and Safety Cote (table 2: OEL)

TWA: 200ppm STEL: 250ppm

Quaternary Ammonium Compounds Complex Amines

Not available Not available

Personal protective equipment

Eye/face protection Chemical safety glasses with side shields to prevent eye contact. As a general rule

do not wear contact lenses when handling chemicals. If contact is possible, the following protection should be worn: Splash goggles. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this

is necessary to avoid exposure to liquid splashes, mists, gases, or dusts. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection Wear chemical resistant gloves, impermeable protective clothing and safety

shoes. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a

specialist before handling this product.



Date of Revision: April 1, 2025

Respiratory protection Use a properly fitted, air-purifying or supplied air respirator complying with an

approved standard if a risk assessment indicates this is necessary.

General hygiene Considerations

Handle in accordance with good industrial hygiene and safety practices. Eye wash

fountains and safety showers must be easily accessible.

Specific engineering controls Use only with adequate ventilation. Use process enclosures, local exhaust

> ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Use explosion-proof

ventilation equipment.

Section 9 – Physical and Chemical Properties

Physical State Water Solubility Completely miscible Liquid **Appearance & Odour** Clear to amber, alcohol **Boiling Point** 64.7°C (Methanol)

odour

Vapour Pressure Not Available **Boiling Range** Not Applicable **Odour Threshold** Not Available **Melting Point** Not Available **Evaporation Rate** Not Available **Freezing Point** Not Available Vapour Density Not Available **Lower Explosive Limit (LEL)** 6 % (Methanol) **Specific Gravity** 0.94 - 0.98**Upper Explosive Limit** Completely miscible

(UEL)

10 (5% v/v) Partition coefficient (n-64.7°C (Methanol) рΗ

octonal/water)

Flammability (Solid, Gas)

Decomposition

Temperature

Not applicable.

Not available. Viscosity Not Available

Section 10 - Stability and Reactivity

Stable under recommended storage conditions.

Reactivity Containers may rupture or explode if exposed to heat.

Chemical stability

Possibility of hazardous

Reactions Vapours may form explosive mixture with air.

Conditions to avoid Heat, flames and sparks.

Materials to avoid Oxidizing materials. Acids, Acid anhydrides, Acyl halides and Alkyl halides. Attacks

copper, aluminum, zinc, nickel and cast iron.

Hazardous decomposition

Hazardous decomposition products formed under fire conditions. - Carbon **Products**

oxides, nitrous oxides.

Other decomposition products - No data available

Section 11- Toxicological Information

Information on Likely Routes of Exposure

Inhalation May cause headache, nausea, dizziness, loss of coordination, central nervous

system depression, respiratory tract irritation, sensitivity to light, and/or blurred



Date of Revision: April 1, 2025

vision. Coma and death due to respiratory failure may follow severe exposures:

Medical treatment necessary. A latent period of several hours may occur

between exposure and the onset of symptoms.

Skin contact Causes serious skin damage and irritation.

Eye contact Causes eye irritation.

Ingestion Poison. May be fatal if swallowed. If swallowed there is a risk of blindness.

Acute and Chronic Toxicity Poison. Toxic if swallowed, in contact with skin or if inhaled. If swallowed there is

a risk of blindness.

Acute toxicity

Product/Ingredient	Result	Species	Dose	Exposure
Name				
Methanol	LC50 Inhalation, vapour	Rat	128.2mg/L	4 Hr
	LD50 Oral	Rat	1187-2769mg/kg	-
	LD50 Dermal	Rabbit	17100mg/kg	-
Quaternary Ammonium	No data available			
Compounds				
Complex Amines	No data available			

Skin corrosion/irritation Causes severe skin burns and irritation.

Serious eye damage/eye irritation

Causes severe eye irritation.

Respiratory or skin sensitization

Does not cause skin sensitization.

Germ cell Mutagenicity No known significant effects or critical hazards.

Carcinogenicity

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.

ACGIH: 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.

Reproductive toxicity Methanol may cause teratogenic/embryotoxic effects based on studies in

laboratory animals.

Specific target organ toxicity - single exposure (Globally Harmonized System)

Causes damage to organs.

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

This substance or mixture is not classified as specific target organ toxicant,

repeated exposure.

Aspiration hazard No aspiration toxicity classification.

Delayed and Immediate Effects and also Chronic Effects from Short and Long Term Exposure **Short Term Exposure**

Potential immediate Health Effects



Date of Revision: April 1, 2025

Poison. Toxic if swallowed, in contact with skin or if inhaled. May be fatal if swallowed. If swallowed there is a risk of blindness. Causes serious eye irritation. Causes damage to organs. Ingestion causes nausea, weakness and central nervous system effects, headache, vomiting, dizziness, symptoms of drunkenness, respiratory tract irritation. Coma and death due to respiratory failure may follow severe exposures: Medical treatment necessary. A latent period of several hours may occur between exposure and the onset of symptoms.

Potential Delayed Health Effects

Symptoms may be delayed. Toxic by ingestion, inhalation or skin contact. Can cause metabolic acidosis, blindness, seizures, liver and kidney damage, unconsciousness, coma and death.

Long Term Exposure

Potential immediate Health Effects

No data available.

Potential Delayed Health Effects

No data available.

Potential Chronic Effects May cause liver and kidney damage.

Synergistic effects Alcohols may interact synergistically with chlorinated solvents (example - carbon

tetrachloride, chloroform, bromotrichloromethane), dithiocarbamates (example -

disulfiram), dimethylnitrosamine and thioacetamide.

Section 12 – Ecological Information

Toxicity

Product / Ingredient Name	Result	Species	Exposure
Methanol	Acute LC50 15400mg/L	Fish – Lepomis macrochirus	96 Hr
	NOEC 7900mg/L	Fish – Oryzias Latipes	200 Hr
	Acute EC50 >10000mg/L	Daphnia – Daphnia magna	48 Hr
Quaternary Ammonium Compounds	No data available		
Complex Amines	No data available		

Persistence and degradability

Biodegradability

Methanol aerobic

Result: 72 % - readily biodegradable Method: OECD Test Guideline 3-1D

Other components have unknown biodegradability.

Bioaccumulative potentialNo data available.Mobility in soilNo data available.PBT and vPvB assessmentNo data available.Other adverse effectsNo data available.

Section 13 - Disposal Considerations

Product This combustible material may be burned in a chemical incinerator equipped with

an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service

to dispose of this material.

Contaminated packaging Dispose of as unused product.



Date of Revision: April 1, 2025

Section 14 - Transportation Information

CANADA Transportation of Dangerous Goods (TDG)

Shipping Name UN1992, Flammable Liquid, Toxic N.O.S. (Methanol), 3. PG II

Class 3

UN Number UN1992

Packaging Group: Ш

Label



Environmental hazards

Transportation in bulk,

if applicable

Special Precautions

No data available No data available

Not a marine pollutant.

Section 15 – Regulatory Information

DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act)

All components of this product are in compliance with the chemical notification

requirements of the NSN Regulations under CEPA, 1999.

TSCA Inventory (8b) All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations and the SDS contains all the information required by the Hazardous Products Regulations.

Section 16 - Other Information

REVISION SUMMARY:

Date of Preparation December 21, 2019 Date of Revision April 1, 2025

SDS Prepared by: CFR Lab Manager

CFR Chemicals Inc. provides the information contained herein in good faith, but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. CFR Chemicals Inc. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, CFR CHEMICALS INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OR RELIANCE UPON THIS INFORMATION.