Section 1 Identification

Product Identifier: (product name)	UniCorr C
Other means of identification: (product family, synonyms, etc)	Corrosion Inhibitor
Recommended use:	Drilling Fluid Product
Restrictions on use:	Industrial Use Only
Canadian supplier identifier: (Name, full address and phone number(s))	**Blackstone Drilling Fluids Ltd** #700, 215 9th Ave SW Calgary, Alberta T2R 1K3
Emergency telephone number: (any restrictions on the use of that number, if applicable)	24HR (403) 262-5955

Section 2 Hazard Identification

Hazard Classification: (class, category or subcategory)

Physical:
Flammable Liquid - Category 4
Health:
Acute Toxicity - Category 4, Inhalation
Acute Toxicity - Category 4, Oral
Acute Toxicity - Category 4, Dermal
Skin corrosion/irritation - Category 1B
Serious eye damage/eye irritation - Category 1
Specific target organ toxicity, single exposure - Category 3

Label Elements:

Signal Word: Danger

Hazard Statement(s):

H226 Flammable liquid and vapor
H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled
H314 Causes severe skin burns and eye damage
H318 Causes serious eye damage
H335 May cause respiratory irritation

Precautionary Statement(s):

Prevention:
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P271 Use only outdoors or in well-ventilated area.
Response:
P370 + P378 In case of fire: Use water spray, dry powder, carbon dioxide, or foam to extinguish.
P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.
P330 Rinse mouth
P302 + P352 IF ON SKIN: Wash with plenty of water.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage:
P403 Store in well-ventilated place.
P233 Store in a well-ventilated place. Keep container tightly closed.
Disposal:
P501 Dispose of contents and container in accordance with local, regional, national and international regulations.

Other Hazards which do not result in classification: n/a

Section 3 Composition/Information on Ingredients

Chemical Name	CAS No. (HMIRA Reg#)	Concentration (% Wt. Range)	Common Name and other identifiers
Modified Amine Solution	68909-77-3	20 – 50 %	
Heterocyclic Amine	21652-27-7	1 – 5 %	

Note: Concentrations are expressed in % weight/weight.
All other ingredients are considered non-hazardous.

Section 4 First-Aid Measures

Inhalation: Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

Skin Contact: Wash affected areas with water while removing contaminated clothing. Remove contaminated clothing. Immediate medical attention required. Wash soiled clothing immediately.

Eye Contact: In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Immediate medical attention required.

Ingestion: Do not induce vomiting. Rinse mouth and then drink plenty of water. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Immediate medical attention required.

Most Important symptoms and effects (acute or delayed): No information.

Immediate medical attention No information.

and special treatment, if necessary:	

Section 5 Fire-Fighting Measures

Suitable Extinguishing Media:	Water spray, dry powder, carbon dioxide, foam.
Specific Methods:	Not listed.
Unsuitable extinguishing Media:	No information.
Specific Hazards:	Nitrogen oxides, carbon oxides. The substances/groups of substances mentioned can be released in case of fire. Under certain conditions in case of fire other hazardous combustion products may be generated.
Special protective equipment and precautions for firefighters:	Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Section 6 Accidental Release Measures

Personal Precautions:	Ensure adequate ventilation.
Protective Equipment:	Wear appropriate respiratory protection. Use personal protective clothing.
Emergency Procedures:	No information.
Methods and materials for containment and cleaning up:	Spills should be contained, solidified, and placed in suitable containers for disposal.

Section 7 Handling and Storage

Precautions for safe handling:	See SDS section 10 - Stability and reactivity. See SDS section 5 - Firefighting measures. Protection against fire and explosion: Moderate explosion hazard when exposed to heat or flames. See SDS section 5 - Firefighting measures.
Conditions for safe storage: (including incompatible materials)	Segregate from acids and acid forming substances. Suitable materials for containers: Carbon steel (Iron), Stainless steel 1.4401, Stainless steel 1.4301 (V2), High density polyethylene (HDPE), glass Further information on storage conditions: Avoid extreme heat. Keep away from sources of ignition - No smoking. Storage stability: Storage temperature: 20 °C Storage duration: 5 - 12 Months The storage stability is conditional on the used material of the storage container. May discolor after lengthy storage. From the data on storage duration in this safety data sheet no agreed statement regarding the warrantee of application properties can be deduced

Section 8 Exposure Controls/Personal Protection

Control parameters: (exposure guidelines or biological exposure limits)	
Engineering Measures:	Provide local exhaust ventilation to control vapors/mists.
Personal Protective Equipment:	
Eye/Face:	Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.
Respiratory:	Wear a NIOSH-certified (or equivalent) organic vapor/particulate respirator. Do not exceed the maximum use concentration for the respirator facepiece/cartridge combination. For emergency or non-routine, high exposure situations, use a NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions. Observe OSHA regulations for respirator use (29 CFR 1910.134).
Hand:	Chemical resistant protective gloves, Consult with glove manufacturer for testing data.
Skin:	Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).
Environmental exposure controls:	No information.
General Safety and hygiene measures:	Eye wash fountains and safety showers must be easily accessible. Wear protective clothing as necessary to prevent contact.

Section 9 Physical and Chemical Properties

Appearance: (physical state, colour, etc.)	Liquid, Light brown
Odour:	Amine-like
Odour Threshold:	Not available.
pH:	11.0 – 12.0
Melting point/Freezing point:	Not available.
Initial boiling point/boiling range:	Not available.
Flash Point:	>100 °C (closed cup)
Evaporation rate	Not available.
Flammability:	Not readily ignited.

(solid; gas)

Lower flammable explosive limit:	Not available.
Upper flammable explosive limit:	Not available.
Specific Gravity:	1.02 ± 0.03 (Water = 1)
Solubility:	Soluble in water.
Auto-ignition temperature:	Not available.
Decomposition temperature:	It is not a self-decompositionable substance.
Viscosity:	Not available.

Section 10 Stability and Reactivity

Reactivity:	Chemically stable
Chemical Stability:	The product is chemically stable.
Possibility of hazardous reactions:	Reacts with oxidizing agents.
Condition to avoid: (static discharge, shock, open flame, or vibration)	Not available.
Incompatible materials:	Acids
Hazardous decomposition products:	No hazardous decomposition products if stored and handled as prescribed/indicated. Hazardous decomposition products: carbon oxides, nitrogen oxides, nitrous gases.
Thermal decomposition:	It is not a self-decompositionable substance.

Section 11 Toxicological information

Information on likely routes of exposure:	Routes of entry for solids and liquids are ingestion and inhalation but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.
Product Information:	
Acute Toxicity:	Assessment of acute toxicity: Of moderate toxicity after short-term inhalation. Of moderate toxicity after short-term skin contact. Of moderate toxicity after single ingestion. Inhalation-risk test (IRT): No mortality within 8 hours as shown in animal studies. The inhalation of a highly saturated vapor-air mixture represents no acute hazard.
Test Results:	**Oral**

Type of value: LD50
Species: rat
Value: 1,515 mg/kg (OECD Guideline 401)

Inhalation
Type of value: LC50
Species: rat
Value: > 1.5 mg/l (IRT)
Exposure time: 6 h
The vapour was tested.
The European Union (EU) has classified this substance as 'harmful'.

Dermal
Type of value: LD50
Species: rabbit
Value: >3000 mg/kg (OECD Guideline 402)
Type of value: LD50
Species: rabbit
Value: >1,600 mg/kg

Other Acute:

Assessment of STOT single:
The available information is not sufficient for evaluation.
Irritation / corrosion
Assessment of irritating effects: Corrosive! Damages skin and eyes. May cause severe damage to
the eyes.

Skin
Species: rabbit
Result: Corrosive.
Method: OECD Guideline 404
Species: rabbit
Result: Corrosive.
Method: similar to OECD guideline 404

Eye
Species: rabbit
Result: Irritant.
Method: OECD Guideline 405

Sensitization
Assessment of sensitization: No sensitizing effect.
Guinea pig maximization test
Species: guinea pig
Result: Non-sensitizing.
Method: OECD Guideline 406
Aspiration Hazard
No aspiration hazard expected.

Chronic Toxicity:

Chronic Toxicity/Effects

Repeated dose toxicity
Assessment of repeated dose toxicity: May affect the liver and kidneys as indicated in animal
studies. After repeated exposure the prominent effect is local irritation. The substance may cause damage to

the upper respiratory tract after repeated inhalation, as shown in animal studies.
Experimental/calculated data: rat (male/female) oral feed > 75 days 100, 300 and 1000 mg/kg bw
NOAEL: 300 mg/kg

Genetic toxicity
Assessment of mutagenicity: In the majority of studies performed with microorganisms and in
mammalian cell culture, a mutagenic effect was not found. A mutagenic effect was also not observed
in in vivo tests. The substance was not mutagenic in bacteria. The substance was not genotoxic in mammalian cell
culture. The substance was not genotoxic in a test with mammals.
Genetic toxicity in vivo: OECD Guideline 474 Micronucleus assay mouse (NMRI) oral unspecified negative
Carcinogenicity
Assessment of carcinogenicity: The whole of the information accessible provides no indication of a carcinogenic effect.

Reproductive toxicity
Assessment of reproduction toxicity: The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. The potential to impair fertility cannot be excluded when given at maternally toxic doses. Because the relevance of the results to human health is unclear, further tests will be initiated.

Teratogenicity
Assessment of teratogenicity: In animal studies the substance did not cause malformations.

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further symptoms are possible.

Medical conditions aggravated by overexposure
Data available do not indicate that there are medical conditions that are generally recognized as being aggravated by exposure to this substance/product. See MSDS section 11 – Toxicological information.

Section 12 Ecological Information

Ecotoxicity: Aquatic toxicity. Acutely toxic for aquatic organisms. Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

Persistence and degradability: Degrades completely.

Mobility in soil: The substance will not evaporate into the atmosphere from the water surface. Adsorption to solid soil phase is not expected.

Bioaccumulative potential: Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Other adverse effects: Assessment of terrestrial toxicity
Study scientifically not justified.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms:
DIN EN ISO 8192-OECD 209-88/302/EEC,P. C aquatic
activated sludge, domestic/EC20 (0.5 h): > 1,500 mg/l
Nominal concentration.
DIN 38412 Part 8 bacterium/EC50 (16 h): 110 mg/l
The details of the toxic effect relate to the nominal concentration.
OECD Guideline 209 aquatic
activated sludge, domestic/EC50 (3 h): > 1,000 mg/l
Persistence and degradability

Assessment biodegradation and elimination (H2O):
Readily biodegradable (according to OECD criteria).
Readily biodegradable (according to OECD criteria).

Elimination information:
> 90 % DOC reduction (21 d) (OECD 301 A (new version)) (aerobic, activated sludge, domestic)

Assessment of stability in water:
According to structural properties, hydrolysis is not expected/probable.
Bio accumulative potential

Assessment transport between environmental compartments.

Additional Information:

Sum parameter
Biochemical oxygen demand (BOD) Incubation period 5 d: 800 mg/g
Other ecotoxicological advice:
Due to the pH-value of the product, neutralization is generally required before discharging sewage
into treatment plants.

Section 13 Disposal Considerations:

Waste disposal methods: Do not discharge substance/product into sewer system. Dispose of in accordance with national, state and local regulations.

Container disposal methods: Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

Safe handling for disposal methods: Use all appropriate PPE and engineering controls when handling or disposing contents and/or container.

Section 14 Transport Information

UN Number: UN 1760

UN Proper shipping name: N/A

Transport hazard class(es): 8

Packing group: III

Environmental hazards:	Not available.
Transport in bulk: (if applicable)	N/A
Special precautions:	Not available.

Section 15 Regulatory Information

Safety, health, and environmental regulations specific to product:

Assessment of the hazard classes according to UN GHS criteria (most recent version):

Acute Tox.	4 (oral)	Acute toxicity
Acute Tox.	4 (dermal)	Acute toxicity
Acute Tox.	4 (Inhalation - vapour)	Acute toxicity
Skin Corr./Irrit.	1B	Skin corrosion/irritation
STOT SE	3 (irritating to respiratory system)	Specific target organ toxicity — single exposure
Aquatic Acute	2	Hazardous to the aquatic environment - acute
Flam. Liq.	4	Flammable liquids
Aquatic Chronic	3	Hazardous to the aquatic environment - chronic
Eye Dam./Irrit.	1	Serious eye damage/eye irritation

Section 16 Other Information

HMIS:	Health	3	**NFPA:**	Health	3
	Fire hazard	2		Flammability	2
	Reactivity	0		Instability	0

Date of the latest revision of the SDS: October 28, 2024

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assume any liability whatsoever for the accuracy or completeness of the information contained herein.
NO WARRANTIES OF USE OR OTHERWISE ARE EXPRESSLY MADE OR IMPLIED FROM THIS INFORMATION. Final determination of suitability of any material is the sole responsibility of the user. All material may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.