

Section 1 - Chemical Product and Company Identification

Product Name	StaClean 220 – System Flush (2% Citric)
Synonyms	Not Applicable
Product Use	Degreaser & Industrial Cleaning Product
Restriction on Use	None identified
Manufacturer/Supplier	CFR Chemicals 38451 Range Road 22 County of Red Deer T4E 2N6 1 (877) 269-3419
General Assistance	
Emergency Telephone	613-966-6666 (CANUTEC 24 Hour Phone Number)
Date of Preparation of SDS	April 1, 2017

Section 2 – Hazard Identification

Signal Word
GHS Pictogram(s)

Danger



Target Organs

Narcotic Effects

Hazard Statement:

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
H361	Suspected of damaging fertility or the unborn child.
H401	Toxic to aquatic life.
H411	Toxic to aquatic life with long-lasting effects.

Precautionary Statement

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surface, sparks, open flames and other ignition sources. No smoking
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.



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P264	Wash skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection/face protection.
Response	
P321	Specific treatment: See Response Statements on this label.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTRE / DOCTOR.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P303 + P361 + P353	IF ON SKIN (OR HAIR): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P331 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	If exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTRE or doctor/physician if you feel unwell.
P331	DO NOT induce vomiting.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical, or alcohol-resistant foam to extinguish
P391	Collect spillage
Storage	
P403 + P233	Store in well-ventilated place. Keep container tightly closed.
P403 + P235	Store in well-ventilated place. Keep cool.
P405	Store locked up.
Disposal	
P501	Dispose of contents/container to an approved waste disposal unit.

GHS Classification

Flammable liquids (Category 3)
Skin corrosion/irritation (Category 2)
Serious eye damage/eye irritation (Category 2A)
Mutagenicity (Category 1B)
Carcinogenicity (Category 1B)
Reproductive Toxicity (Category 2)
Specific target organ toxicity - single exposure (Category 3)
Aspiration hazard (Category 1)
Hazardous to the aquatic environment, acute hazard (Category 2)
Hazardous to the aquatic environment, acute chronic (Category 2)

HMIS Classification

Health Hazard	2
Chronic Health Hazard	*
Flammability	3
Physical Hazards	0

Potential Health Effects

Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Skin	Causes skin irritation.

Eye
Ingestion

Causes serious eye irritation.
May be harmful if swallowed.

Section 3 – Composition Information on Ingredients

HAZARDOUS INGREDIENT	Hazardous Ingredient, Synonyms	PERCENT	CAS NUMBER
Naptha, petroleum, heavy catalytic reformed**	Heavy aromatic naptha; Heavy aromatic naptha, gasoline re-run overhead; Aromatic hydrocarbon mixture	5 – 20%	64741-68-0
Isopropyl Alcohol	2-propanol; IPA; Isopropyl Alcohol; 1-methylethanol; 1-methylethyl alcohol; 2-hydroxypropane; i-propanol; propan-2-ol; sec-propanol.	1 – 5%	67-63-0
Terpene Hydrocarbon	Not Applicable	5 – 15%	5989-27-5
Ethoxylated Alcohol	Not Applicable	1 – 5%	68439-46-3
Formaldehyde, polymer with 4-nonylphenol and oxirane	Not Applicable	1 – 5%	30846-35-6
Citric Acid	2-Hydroxypropane-1,2,3-tricarboxylic acid	0 – 2%	77-92-9

* = Various ** = Mixture *** = Proprietary

Chemical Formula

Mixture

Section 4 - First Aid Measures

Inhalation

Move victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that vapour is still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular, or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison centre or physician. 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.

Eye Contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower lids. Check for and remove contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Skin Contact

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

Get medical attention immediately. Call a poison control centre or physician. Wash out mouth with water. 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 No data available.

Delayed No data available.

Note to Physician Treat symptomatically.

Section 5 – Fire-Fighting Measures

Flash Point (°C)	39°C
Flash Point Method	PMCC
Auto Ignition Temperature	No data available. .
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.
Extinguishing Media	Use water spray (fog), alcohol-resistant foam, dry chemical or carbon dioxide
Unsuitable Extinguishing Media	Water streams.
Unusual Fire/	
Explosion Hazard	No data available.
Hazardous Combustion	
Products	Carbon oxides. May release flammable gases.
Special Protective Equipment and	
Precautions for Firefighters	Wear appropriate protective equipment and self-contained breathing apparatus with a full face-piece operated in positive pressure mode.

Section 6 – Accidental Release Measures

Personal precautions	Use 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 environment must 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.
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Conditions for safe storage	Keep container tightly closed in a dry and well-ventilated place.
Incompatible Conditions	Heat, flames and sparks.
Incompatible Materials	Strong acids. Strong bases. Strong oxidizers.

Section 8 – Exposure Controls / Personal Protection

Occupational Exposure Limits

Ingredient Name	Exposure Limits
Naptha, petroleum, heavy catalytic reformed**	Canada, Alberta, Occupational Health and Safety Code (table 2: OEL) Not Established
Isopropanol	Canada, Alberta, Occupational Health and Safety Code (table 2: OEL) STEL: 400ppm TWA: 200ppm
Terpene Hydrocarbon	Canada, Alberta, Occupational Health and Safety Code (table 2: OEL) TWA: 20ppm
Ethoxylated Alcohol	Canada, Alberta, Occupational Health and Safety Code (table 2: OEL) Not Established
Formaldehyde, polymer with 4-nonylphenol and oxirane	ACGIH TLV TWA: 25ppm 8 Hours OSHA PEL TWA: 25ppm
Citric Acid	Canada, Alberta OHSC Code Not listed

Personal 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.
Skin protection	Wear chemical resistant gloves, impermeable protective clothing and safety shoes.
Respiratory protection	Use NIOSH approved respirators and components.
General hygiene	
Considerations	Handle in accordance with good industrial hygiene and safety.
Specific engineering controls	Use mechanical exhaust or laboratory fumehood to avoid exposure. Safety shower, eye wash, and fire extinguisher should be present.

Section 9 – Physical and Chemical Properties

Physical State	Liquid	Water Solubility	Forms emulsion
Appearance & Odour	Clear, straw to dark brown colour. Aromatic odour.	Boiling Point	> 100°C
Vapour Pressure	Not available	Boiling Point Range	Not available
Vapour Density	Not available	Melting Point	0°C
Specific Gravity	0.98	Freezing Point	0°C
Partition coefficient (n-octonal/water)	No data available	Lower Explosive Limit (LEL)	Not available
pH	No data available	Upper Explosive Limit (UEL)	Not available
Flashpoint (Method)	39°C (PMCC)	Auto Ignition temperature	Not available
Odour Threshold	Not available	Evaporation Rate	Not available
Flammability (Solid, Gas)	Not available		

Decomposition Temperature Not available

Viscosity Not available

Section 10 – Stability and Reactivity

Reactivity	Heating may cause fire.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No data available
Conditions to avoid	Heat, flames and sparks.
Materials to avoid	Strong acids. Strong bases. Strong oxidizers.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - Carbon oxides. Other decomposition products - No data available

Section 11- Toxicological Information

Information on Likely Routes of Exposure

Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Skin	Causes skin irritation.
Eye	Causes serious eye irritation.
Ingestion	May be harmful if swallowed.

Acute and Chronic Toxicity No data available

Acute toxicity

Product/Ingredient Name	Result	Species	Dose	Exposure
Naptha, petroleum heavy catalytic reformed	LC50 Inhalation gas	Rat	>5.04mg/L	4 Hr
	LD50 Dermal	Rabbit	>2000mg/kg	24 Hr
	LC50 Inhalation gas	Rat	73mg/L	4 Hr
Isopropanol	LD50 Oral	Rat	5045mg/kg	-
	LD50 Dermal	Rabbit	12870mg/kg	-
	LD50 Oral	Rat	4400ppm	-
Terpene Hydrocarbon	LD50 Dermal	Rabbit	>5000mg/kg	-
	LD50 Oral	Rat	>2000mg/kg	-
Ethoxylated Alcohol	LD50 Oral	Rat	>2000mg/kg	-
Formaldehyde, polymer with 4-nonylphenol and oxirane	No data available			
Citric Acid	LD50 Oral	Rat	5400mg/kg	-
	LD50 Dermal	Rat	2000mg/kg	-

Skin corrosion/irritation Causes skin irritation.**Serious eye damage/eye irritation** Causes serious eye irritation.

Respiratory or skin sensitization

Not classified.

Mutagenicity May cause genetic defects.**Carcinogenicity** May cause cancer.**Reproductive toxicity** Suspected of damaging fertility or the unborn child.**Specific target organ toxicity - single exposure (Globally Harmonized System)** May cause drowsiness or dizziness.



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

Not assigned.

Aspiration hazard

May be fatal if swallowed and enters airways.

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

Short Term Exposure

Potential immediate Health Effects No data available.

Potential Delayed Health Effects No data available.

Long Term Exposure

Potential immediate Health Effects No data available.

Potential Delayed Health Effects No data available.

Potential Chronic Effects No data available.

Synergistic effects No data available

Section 12 – Ecological Information

Toxicity

Product / Ingredient Name	Result	Species	Exposure
Naptha, petroleum heavy catalytic reformed	Acute EC50 – 11mg/L	Pseudokirchneriella subcaptata	72 Hr
Isopropanol	Acute LC50 9640mg/L	Fish – Pimephales promelas	96 Hr
	Acute EC50 5102mg/L	Daphnia – Daphnia magna	24 Hr
Terpene Hydrocarbon	No data available		
Ethoxylated Alcohol	No data available		
Formaldehyde, polymer with 4-nonylphenol and oxirane	No data available		
Citric Acid	LC50 440mg/L	Fish – Leuciscus idus	48 Hr

Persistence and degradability

Biodegradability May cause long-term adverse effects in the environment.

Bioaccumulative potential No data available

Mobility in soil No data available

PBT and vPvB assessment No data available

Other adverse effects None known.

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.

Section 14 - Transportation Information

CANADA Transportation of Dangerous Goods (TDG)

Shipping Name UN1268, Petroleum Distillates, N.O.S., 3. PG III
Class 3
UN Number UN1268
Packaging Group: III
Label



Reportable Quantity 12345.7 lbs / 5604.9Kg [2177.5 gal / 8242.6L]
Package sizes shipped in quantities less than the product reportable quantity are not subject to the RW transportation requirements.

Environmental hazards Marine Pollutant

Transportation in bulk, if applicable No data available

Special Precautions No data available

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 Listed

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 April 1, 2017
Date of Revision March 15, 2022

SDS Prepared by: CFR Lab Manager

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Safety Data Sheet – GHS
StaClean 220 – System Flush (2% Citric)

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