


Section 1 - Chemical Product and Company Identification

Product Name	CDG 215
Synonyms	CDG 212 Experimental, CDG 212-E
Product Use	Degreaser
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	October 31, 2019

Section 2 – Hazard Identification

Signal Word	Danger
GHS Pictogram(s)	
Target Organs	Respiratory Irritation
Hazard Statement:	
H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H401	Toxic to aquatic life.
Precautionary Statement	
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.
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.
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 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTRE or doctor/physician if you feel unwell.
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
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 2) Skin corrosion/irritation (Category 2) Serious eye damage/eye irritation (Category 2A) Specific target organ toxicity - single exposure (Category 3) Hazardous to the aquatic environment, acute hazard (Category 2)
---------------------------	---

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

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

Section 3 – Composition Information on Ingredients

HAZARDOUS INGREDIENT	Hazardous Ingredient, Synonyms	PERCENT	CAS NUMBER
Methyl 9-dodeceonate	9-dodecenoic acid methyl ester	50 – 75%	39202-17-0
Isopropyl Alcohol	2-propanol; IPA; Isopropyl Alcohol; 1-methylethanol; 1-methylethyl alcohol; 2-hydroxypropane; i-propanol; propan-2-ol; sec-propanol.	5 – 15%	67-63-0
Ethoxylated Alcohol	Not Applicable	2 – 5%	68439-46-3
Formaldehyde, polymer with 4-nonylphenol and oxirane	Not Applicable	2 – 5%	30846-35-6

* = 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)	20°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.

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

Methyl 9-dodecenoate

Exposure Limits

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

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

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. Characteristic odour.	Boiling Point	>80°C
Vapour Pressure	Not available	Boiling Point Range	Not available
Vapour Density	Not available	Melting Point	-30°C
Specific Gravity	0.90 – 0.94	Freezing Point	-30°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)	20°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. Not reactive under normal conditions.
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. May cause 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
Methyl-9-dodecenoate	LD50 Oral	Rat	>2000mg/kg	-
	LC50 Inhalation gas	Rat	73mg/L	4 Hr
Isopropanol	LD50 Oral	Rat	5045mg/kg	-
	LD50 Dermal	Rabbit	12870mg/kg	-
Ethoxylated Alcohol	LD50 Oral	Rat	>2000mg/kg	-
Formaldehyde, polymer with 4-nonylphenol and oxirane	No data available			

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye irritation.

Respiratory or skin sensitization Not classified.

Mutagenicity Not classified.

Carcinogenicity Not classified.

Reproductive toxicity Not classified.

Specific target organ toxicity - single exposure (Globally Harmonized System) May cause respiratory tract irritation

Specific target organ toxicity - repeated exposure (Globally Harmonized System) Not assigned.

Aspiration hazard Not classified.

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
Methyl-9-dodecenoate	LC 50 no effects at saturation conc.	Fish – pimephales promelas	72 hr
		Fish – Pimephales promelas	96 Hr
Isopropanol	Acute LC50 9640mg/L Acute EC50 5102mg/L	Daphnia – Daphnia magna	24 Hr
Ethoxylated Alcohol	No data available		
Formaldehyde, polymer with 4-nonylphenol and	No data available		

oxirane

Persistence and degradability

Biodegradability

Methyl 9-dodecenoate is readily biodegradable
No data on remainder of product
May cause long-term adverse effects in the environment.

Bioaccumulative potential

Product/Ingredient Name	LogP _{ow}	BCF	Potential
Methyl-9-dodecenoate	5.85 – 5.96	153 L/kg	Low potential indicated
Isopropanol	<4	Not available	Not available
Ethoxylated Alcohol	Not available	Not available	Not available
Formaldehyde, polymer with 4-nonylphenol and oxirane	Not available	Not available	Not available

Mobility in soil

Methyl-9-dodecenoate: Adsorption/desorption coefficient Log Koc 3.93

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 UN1219, Isopropanol Solution, 3. PG II

Class 3

UN Number UN1219

Packaging Group: II

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	October 31, 2019
Date of Revision	February 13, 2020

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.