Safety Data Sheet

Section 01 - Identification

Product Identifier	Celatom FW-12, FW-14, FW-18, FW-20, FW-40, FW-50, FW-60, FW-70, FW-80, SP
Other Means of Identification	Aqua-cel, flux calcined diatomaceous earth
Product Use and Restrictions on Use	Filter aid and fillers.
Initial Supplier Identifier	ClearTech Industries Inc. 1500 Quebec Avenue Saskatoon, SK. Canada S7K 1V7
Prepared By	ClearTech Industries Inc. Technical Writer Phone: 1 (800) 387-7503
24-Hour Emergency Phone	Phone: 1 (306) 664 – 2522

Section 02 - Hazard Identification

GHS-Classification

STOT-Repeated Exposure	Category 1
Carcinogenicity	Category 1A

Physical Hazards

No known physical hazards.

Danger

Hazards Statements
H372 – Causes damage to lungs through prolonged or repeated exposure via inhalation.
H350 – May cause cancer.

Pictograms

Precautionary Statements
P201 – Obtain special instructions before use.
P202 – Do not handle until all safety precautions have been read and understood.
P280 – Wear protective gloves, protective clothing, eye protection, and face protection.
P308 + P313 – IF exposed or concerned: Get medical advice/attention.
P260 – Do not breathe dust.
P264 – Wash hands thoroughly after handling.
P270 – Do not eat, drink or smoke when using this product.

P405 – Store locked up.
P501 – Dispose of contents/container in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act

Section 03 - Composition / Information on Ingredients

Chemical Name	CAS Number	Weight %	Unique Identifiers
Diatomaceous Earth, Flux Calcined	68855-54-9	100%	
Crystalline Silica	14464-46-1	35-50%	

Section 04 - First Aid Measures

Inhalation
If high airborne concentrations are present, take proper precautions to ensure your own safety. If symptoms are experienced, Remove victim to fresh air. Blow nose to evacuate dust. Seek medical attention if symptoms persist.

Skin Contact / Absorption
No health effects expected. If irritation does occur, flush with lukewarm, gently flowing water for 5 minutes or until the chemical is removed.

Eye Contact
Do not allow victim to rub eye(s). Let the eye(s) water naturally for a few minutes. Have victim move their eyes around to attempt to dislodge particle/dust. If not dislodged, flush with lukewarm, gently flowing water for 30 minutes, while holding the eyelid(s) open. If irritation persists, seek medical attention. DO NOT attempt to manually remove anything stuck to the eye(s).

Ingestion
No known health effects with short-term exposure. Drink water to reduce bulk and drying effects. Seek medical attention if symptoms appear.

Additional Information
NOTE: This product contains an ingredient that may cause cancer. Take proper precautions to ensure your own safety before assisting others.

Section 05 - Fire Fighting Measures

Suitable Extinguishing Media
Product does not burn. Use appropriate extinguishing media for material that is supplying the fuel to the fire.

Unsuitable Extinguishing Media
Not Available

Specific Hazards Arising From the Chemical
Not Applicable

Special Protective Equipment and Precautions for Fire-Fighters
Wear NIOSH-approved self-contained breathing apparatus and protective clothing.

Further Information
Not Available

Section 06 - Accidental Release Measures

Personal Precautions / Protective Equipment / Emergency Procedures
Wear appropriate personal protective equipment. Ventilate area. Only enter area with PPE. Stop or reduce leak if safe to do so. Flush with water to remove any residue.

Environmental Precautions
This material is not a significant environmental concern.

Methods and Materials for Containment and Cleaning Up
Do not dry sweep. Whenever possible, wet down with a water spray to minimize the amount of dust or use a vacuum equipped with HEPA filters.

Section 07 - Handling and Storage

Precautions for Safe Handling	This material is a VERY TOXIC solid (CANCER HAZARDS and LONG-TERM INHALTION HAZARD). Before handling, it is important that engineering controls are operating. Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure.
Conditions for Safe Storage	Keep quantity stored as small as possible. Store in suitable, labelled containers. Store away from incompatible materials.
Incompatibilities	Stong oxidizing agents, hydrofluoric acid, strong alkalis, magnesium, manganese trifluoride, xenon hexafluoride.

Section 08 - Exposure Controls and Personal Protection

Exposure Limit(s)

Component	Regulation	Type of Listing	Value
Cristobalite	ACGIH	TLV	0.025mg/m^3
	OSHA	PEL-TWA	0.05mg/m^3
Quartz	ACGIH	TLV	0.025mg/m^3

Engineering Control(s)

Ventilation Requirements	Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions must be provided in accordance with all fire codes and regulatory requirements. Supply sufficient replacement air to make up for air removed by exhaust systems.
Other	Emergency shower and eyewash must be available and tested in accordance with regulations and be in close proximity.

Protective Equipment

Eyes/Face	Safety chemical goggles suitable for dust protection. Contact lenses should not be worn; they may contribute to severe eye injury.
Hand Protection	No specific requirement, but it is good practice to prevent skin contact.
Skin and Body Protection	No specific requirement, but it is good practice to prevent skin contact. To reduce exposure, work clothing should be left at the workplace. No special footwear is required other than what is mandated at place of work.
Respiratory Protection	NIOSH approved respirators (standard 42CFR84, series N95) are recommended when dust is present.
Thermal Hazards	Not Available

Section 09 - Physical and Chemical Properties

Appearance

Physical State	Solid, powder
Colour	White, buff, or pink
Odour	Odourless
Odour Threshold	Not Available

Property	
pH	6-8
Melting Point/Freezing Point	>1300°C
Initial Boiling Point and Boiling Range	>1300°C
Flash Point	Not Applicable
Evaporation Rate	Not Applicable
Flammability	Non-flammable
Upper Flammable Limit	Not Applicable
Lower Flammable Limit	Not Applicable
Vapour Pressure (mm Hg, 20°C)	~0
Vapour Density (Air=1)	Not Applicable
Relative Density	Not Available
Solubility(ies)	Insoluble in water. Soluble in hydrofluoric acid. Insoluble in organic solvent and most acids and bases.
Partition Coefficient: n-octanol/water	Not Applicable
Auto-ignition Temperature	Not Applicable
Decomposition Temperature	>1300°C
Viscosity	Not Applicable
Explosive Properties	Not Applicable
Specific Gravity (Water=1)	2.25
% Volatiles by Volume	Not Available
Formula	SiO_2
Molecular Weight	60.08

Section 10 - Stability and Reactivity

Reactivity	Silica combines chemically with most metallic oxides at elevated temperatures to form “glass”.
Stability	Normally stable.
Possibility of Hazardous Reactions	Polymerization will not occur.
Conditions to Avoid	Generation of dust.

Incompatible Materials	Stong oxidizing agents, hydrofluoric acid, strong alkalis, magnesium, manganese trifluoride, xenon hexafluoride.
Hazardous Decomposition Products	None

Section 11 - Toxicological Information

Acute Toxicity

Component	Oral LD_{50}	Dermal LD_{50}	Inhalation LC_{50}
Diatomaceous Earth	Not Available	Not Available	Not Available

Chronic Toxicity – Carcinogenicity

Component	IARC
Crystalline Silica	Group 1: Carcinogenic to humans.

Calcined diatomaceous earth (Kieselguhr) is composed of amorphous and crystalline silica. Amorphous silica is not classifiable as carcinogenic to humans. Crystalline silica inhaled as respirable dust, has been classified as carcinogenic to humans over prolonged and sustained exposure. Long-term inhalation of respirable crystalline silica may contribute to the respiratory disease silicosis (non-cancerous lung disease). In a 1997 monograph (Volume 68, “Silica”), the International Agency for Research on Cancer (IARC) concluded that overall the epidemiological findings support increased risk of lung cancer from inhaled crystalline silica resulting from occupational exposure (Group 1), while there was inadequate evidence in humans for the carcinogenicity of amorphous silica (Group 3).

Skin Corrosion/Irritation	Not expected to be irritating to skin.
Ingestion	May cause slight irritation. Not hazardous when digested.
Inhalation	Upper respiratory irritant. May cause coughing or throat irritation. Breathing dust containing crystalline silica over a long period may cause lung damage.
Serious Eye Damage/Irritation	The dust is probably irritating as a “foreign substance”.
Respiratory or Skin Sensitization	Not reported as a human respiratory sensitizer.
Germ Cell Mutagenicity	Not Available
Reproductive Toxicity	Not Available
STOT-Single Exposure	Upper respiratory irritant. May cause coughing or throat and nose irritation.
STOT-Repeated Exposure	Several human population studies suggest that inhalation exposure to airborne crystalline silica may be associated with the development of kidney diseases. However, there is not enough evidence to conclude a causal link. Case reports and human population studies also suggest a possibly link with the development of autoimmune disorders.
Aspiration Hazard	Breathing dust containing crystalline silica over a long period may cause congestion and lung damage.
Synergistic Materials	There is a disagreement about whether tobacco smoke increases the severity of the effect of crystalline silica dust on respiratory impairment.

Section 12 – Ecological Information

Ecotoxicity

Component	Toxicity to Algae	Toxicity to Fish	Toxicity to Daphnia and Other Aquatic Invertebrates
Diatomaceous Earth	Not Available	Not Available	Not Available

Biodegradability	Non-biodegradable.
Bioaccumulation	Inert, with little potential for bioaccumulation.

Mobility	Not Available
Other Adverse Effects	Insoluble mineral products. Will not have an adverse effect on waterways.

Section 13 – Disposal Considerations

Waste From Residues/Unused Products	Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.
Contaminated Packaging	Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Section 14 – Transport Information

UN Number	Not Regulated
UN Proper Shipping Name	Not Regulated
Transport Hazard Class(es)	Not Regulated
Packaging Group	Not Regulated
Environmental Hazards	Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.
Special Precautions	Not Available
Transport in Bulk	Not Available

TDG

Other	Secure containers (full and/or empty) with suitable hold down devises during shipment and ensure all caps, valves, or closures are secured in the closed position.

TDG PRODUCT CLASSIFICATION: This product has been classified on the preparation date specified at section 14 of this MSDS / SDS, for transportation in accordance with the requirements of part 2 of the Transportation of Dangerous Goods Regulations. If applicable, testing and/or published test data regarding the classification of this product are listed in the references at section 16 of this MSDS / SDS.

Section 15 – Regulatory Information

NOTE: THE PRODUCT LISTED ON THIS SDS HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS. THIS SDS CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.

Section 16 – Other Information

Preparation Date	November 23, 2015

Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.

Attention: Receiver of the chemical goods / SDS coordinator

As part of our commitment to the Canadian Association of Chemical Distributors (CACD) Responsible Distribution® initiative, ClearTech Industries Inc. and its associated companies require, as a condition of sale, that you forward the attached Safety Data Sheet(s) to all affected employees, customers, and end-users. ClearTech will send any available supplementary handling, health, and safety information to you at your request.

If you have any questions or concerns please call our customer service center.

References:

1) CHEMINFO
2) eChemPortal
3) TOXNET
4) Transportation of Dangerous Goods Canada
5) HSDB
6) ECHA

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