

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations.

Revision Date: 03/01/2019 Date of Issue: 02/28/2018 Supersedes SDS Date: 02/28/2018 Version 3.0 Revision Impetus: Text and logo format changes.

SECTION 1: IDENTIFICATION

Product Identifier

Product Name: TekFlex® Dry Spray **Synonyms:** Flexible cement based sealant

Intended Use of the Product

Mine sealant

Name, Address, and Telephone of the Responsible Party

USA: Canada: Minova USA Inc. Minova

150 Summer Court 576 Arvin Avenue

Georgetown, KY 40324 Stoney Creek, ON - Canada L8E 5P1

T 502-863-6800 T 905-643-1166

For SDS Requests:

Call 1-855-266-7422 or email sds.na@orica.com

www.minovaglobal.com

Emergency Telephone Number

Emergency number: For chemical emergencies (24 hour) involving transportation, spill, leak, release, fire or accidents **IN THE U.S.**

or CANADA CALL: CHEMTREC 1-800-424-9300, Minova CCN 14730.

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Skin Irrit. 2 H315 Skin Sens. 1 H317 Eye Irrit. 2A H319

STOT SE 3 H335 Carc. 1A H350

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)





Signal Word (GHS-US) : Danger

Hazard Statements (GHS-US) : H315 – Causes skin irritation.

H317 – May cause an allergic skin reaction.
H319 – Causes serious eye irritation.
H335 – May cause respiratory irritation.
H350 – May cause cancer (Inhalation)

Precautionary Statements (GHS-US) : P261 – Avoid breathing dust.

P264 – Wash hands, forearms, and exposed areas thoroughly after handling.

P280 – Wear protective clothing, protective gloves, eye protection. P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

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+P313 – If exposed or concerned: Get medical advice/attention.

P310 – Immediatley call a Poison Center or doctor/physician.

P333+P313 – If skin irritation or rash occurs: Get medical advice/attention. P337+P313 – If eye irritation persists: Get medical advice/attention. P362+P364 – Take off contaminated clothing and wash it before reuse.

03/01/2019 EN (English US) 1/8

Public

Safety Data Sheet

<u>Other Hazards</u> Contains Portland cement or other caustic material which may cause an allergic skin reaction in sensitive individuals. Wet cement can dry the skin and cause chemical burns. Product contains quartz in which repeated or prolonged exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis and may cause cancer.

Other Hazards Not Contributing to the Classification: None

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product identifier	% (w/w)	Classification (GHS-US)
Polymer Latex	(CAS No) Not Reported	40 – 70	Skin Irrit. 2, H315
			Eye Dam. 2A, H319
			STOT SE 3, H335
Quartz	(CAS No) 14808-60-7	10 – 30	Carc. 1A, H350
			STOT SE 3, H335
			STOT RE 1, H372
Cement, alumina, chemicals	(CAS No) 65997-16-2	10 – 30	Eye Irrit. 2A, H319
Calcium hydroxide	(CAS No) 1305-62-0	1-5	Skin Irrit. 2, H315
			Eye Dam. 1, H318
			STOT SE 3, H335

A range of concentration as prescribed by the Controlled Products Regulations has been used where necessary, due to varying composition. Full text of H-phrases: see section 16.

SECTION 4: FIRST AID MEASURESSECTION

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible). **Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Keep at rest and in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin Contact: Remove contaminated clothing. Rinse off affected area with water. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Immediately call a doctor/physician.

Ingestion: Rinse mouth. Do not induce vomiting. If spontaneous vomiting occurs, have victim lean forward with head positioned between legs to avoid breathing in of vomit, rinse mouth and have victim drink plenty of water. Immediately call a POISON CENTER or doctor/physician. Never give anything by mouth to an unconscious person.

Most Important Symptoms and Effects Both Acute and Delayed

General: Irritation can be serious and damage eyes, respiratory system and skin. May cause an allergic skin reaction.

Inhalation: Causes irritation to the respiratory tract.

Skin Contact: Causes skin irritation. Exposure may produce an allergic reaction.

Eye Contact: Causes serious eye irritation.

Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: Product contains a low percentage of quartz in which exposure to amounts that will result in chronic symptoms is highly unlikely; however, repeated or prolonged exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis and may cause cancer.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Wet cement is alkaline.

03/01/2019 EN (English US) 2/8

Safety Data Sheet

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. **Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Firefighters should wear full protective gear.

Hazardous Combustion Products: Oxides of calcium and other metal oxides. As in all fires toxic and noxious fumes.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not get in eyes or on skin. Do not breathe dust.

For Non-Emergency Personnel

Protective Equipment: Use appropriate Personal Protection Equipment (PPE).

Emergency Procedures: Evacuate danger area.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: In the event of a spill or leak of material sweep up material. Avoid creating excessive dust and as with all

spills, minimize material from entering water ways.

Environmental Precautions

Avoid release to the environment.

Methods and Material for Containment and Cleaning Up

For Containment: Avoid generation of dust during clean-up of spills.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: Good housekeeping is needed during storage, transfer, handling, and use of this material to avoid excessive dust accumulation. Never add material to this product unless instructed by Minova.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Always wash your hands immediately after handling this product, and once again before leaving the workplace.

Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Store in a dry, cool place.

Incompatible Materials: Acids.

Specific End Use(s)

Mine sealant

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Quartz (14808-60-7)		
USA ACGIH	ACGIH TWA (mg/m³)	0.025 mg/m ³
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.05 mg/m³
USA IDLH	US IDLH (mg/m³)	50 mg/m ³
Alberta	OEL TWA (mg/m³)	0.025 mg/m ³
British Columbia	OEL TWA (mg/m³)	0.025 mg/m ³
Manitoba	OEL TWA (mg/m³)	0.025 mg/m ³
New Brunswick	OEL TWA (mg/m³)	0.1 mg/m³
Newfoundland & Labrador	OEL TWA (mg/m³)	0.025 mg/m ³
Nova Scotia	OEL TWA (mg/m³)	0.025 mg/m ³
Nunavut	OEL TWA (mg/m³)	0.3 mg/m³ (total mass)
Northwest Territories	OEL TWA (mg/m³)	0.3 mg/m³ (total mass)
Ontario	OEL TWA (mg/m³)	0.10 mg/m³ (designated substances regulation)
Prince Edward Island	OEL TWA (mg/m³)	0.025 mg/m³

Safety Data Sheet

Québec	VEMP (mg/m³)	0.1 mg/m³	
Saskatchewan	OEL TWA (mg/m³)	0.05 mg/m³	
Yukon	OEL TWA (mg/m³)	300 particle/mL	
Calcium hydroxide (1305-62	Calcium hydroxide (1305-62-0)		
USA ACGIH	ACGIH TWA (mg/m³)	5 mg/m³	
USA OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m ³	
USA NIOSH	NIOSH REL (TWA) (mg/m³)	5 mg/m ³	
Alberta	OEL TWA (mg/m³)	5 mg/m ³	
British Columbia	OEL TWA (mg/m³)	5 mg/m ³	
Manitoba	OEL TWA (mg/m³)	5 mg/m ³	
New Brunswick	OEL TWA (mg/m³)	5 mg/m³	
Newfoundland & Labrador	OEL TWA (mg/m³)	5 mg/m³	
Nova Scotia	OEL TWA (mg/m³)	5 mg/m³	
Nunavut	OEL STEL (mg/m³)	10 mg/m³	
Nunavut	OEL TWA (mg/m³)	5 mg/m ³	
Northwest Territories	OEL STEL (mg/m³)	10 mg/m ³	
Northwest Territories	OEL TWA (mg/m³)	5 mg/m ³	
Ontario	OEL TWA (mg/m³)	5 mg/m³	
Prince Edward Island	OEL TWA (mg/m³)	5 mg/m³	
Québec	VEMP (mg/m³)	5 mg/m ³	
Saskatchewan	OEL STEL (mg/m³)	10 mg/m³	
Saskatchewan	OEL TWA (mg/m³)	5 mg/m³	
Yukon	OEL STEL (mg/m³)	10 mg/m ³	
Yukon	OEL TWA (mg/m³)	5 mg/m³	

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Safety glasses. Insufficient ventilation: wear respiratory protection.









Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Safety glasses or chemical goggles as appropriate to prevent eye contact.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use a NIOSH-approved respirator "dust mask" when spraying this product or in dusty conditions or whenever exposure may exceed established Occupational Exposure Limits.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State : Solid

Appearance:Grey powderOdor:Not applicableOdor Threshold:Not applicable

pH : Alkaline when mixed with water

Relative Evaporation Rate (butyl acetate=1): Not applicableMelting Point: Not applicableFreezing Point: Not applicableBoiling Point: Not applicable

Safety Data Sheet

Flash Point Not applicable **Auto-ignition Temperature** Not applicable **Decomposition Temperature** Not applicable Flammability (solid, gas) Not applicable **Lower Flammable Limit** Not applicable **Upper Flammable Limit** Not applicable **Vapor Pressure** Not applicable Relative Vapor Density at 20 °C Not applicable **Relative Density** Not applicable **Specific Gravity** Not applicable

Solubility : Slightly soluble in water

Viscosity : Not applicable

Explosion Data – Sensitivity to Mechanical Impact : Not applicable

Explosion Data – Sensitivity to Static Discharge : Not applicable

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Wet cement is alkaline. As such it is incompatible with acids, ammonium salts and phosphorus.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Use of product in extremely high or low temperatures will affect set times.

Incompatible Materials: Acids.

Hazardous Decomposition Products: Oxides of calcium and other metal oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

<u>Information on Toxicological Effects - Product</u>

Acute Toxicity: Not toxic based on mixture ingredients. **LD50 and LC50 Data:** Refer to individual mixture ingredients.

Skin Corrosion/Irritation: Causes skin irritation.

Serious Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified

Teratogenicity: No based on mixture ingredients **Carcinogenicity:** May cause cancer (Inhalation)

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: No based on mixture ingredients

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Irritation to the respiratory tract

Symptoms/Injuries After Skin Contact: Causes skin irritation. Exposure may produce an allergic reaction. **Symptoms/Injuries After Eye Contact:** Causes serious eye irritation. May lead to eye damage if not treated.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: Repeated and prolonged inhalation may damage lungs and may cause cancer.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

LD30 and LC30 Data.	
Quartz (14808-60-7)	
LD50 Oral Rat	> 5000 mg/kg
Calcium hydroxide (1305-62-0)	
LD50 Oral Rat	7340 mg/kg
Quartz (14808-60-7)	
IARC Group	1
National Toxicity Program (NTP) Status	Known Human Carcinogens.

Safety Data Sheet

SECTION 12: ECOLOGICAL INFORMATION

Toxicity Not available

Persistence and Degradability Not available

Bioaccumulative Potential

Calcium hydroxide (1305-62-0)

BCF fish 1 (no bioaccumulation)

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: If this product as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Dispose of material in accordance with all applicable federal, state/provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT Not regulated for transport

14.2 In Accordance with IMDG Not regulated for transport

14.3 In Accordance with IATA Not regulated for transport

14.4 In Accordance with TDG Not regulated for transport

National Motor Freight Classification

NMFC Name: Cement, Hydraulic NMFC Number: 42130 Class: 50

Tariff Classification Number: 2523.90.0000

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

TekFlex® Dry Spray	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
Quartz (14808-60-7)	

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Cement, alumina, chemicals (65997-16-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Calcium hydroxide (1305-62-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

US State Regulations

Quartz (14808-60-7)	
U.S California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of
	California to cause cancer.

Quartz (14808-60-7)

- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Acceptable Ambient Concentrations
- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Emission Levels (ELs)
- U.S. Idaho Occupational Exposure Limits Mineral Dusts
- U.S. Illinois Toxic Air Contaminant Carcinogens
- U.S. Illinois Toxic Air Contaminants
- U.S. Maine Chemicals of High Concern
- U.S. Massachusetts Right To Know List
- U.S. Michigan Occupational Exposure Limits TWAs
- U.S. Minnesota Chemicals of High Concern
- U.S. Minnesota Hazardous Substance List

03/01/2019 EN (English US) 6/8

Safety Data Sheet

- U.S. Minnesota Permissible Exposure Limits TWAs
- U.S. New Hampshire Regulated Toxic Air Pollutants Ambient Air Levels (AALs) 24-Hour
- U.S. New Hampshire Regulated Toxic Air Pollutants Ambient Air Levels (AALs) Annual
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New Jersey Special Health Hazards Substances List
- U.S. Oregon Permissible Exposure Limits Mineral Dusts
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Tennessee Occupational Exposure Limits TWAs
- U.S. Texas Effects Screening Levels Long Term and Short Term
- U.S. Vermont Permissible Exposure Limits TWAs
- U.S. Washington Permissible Exposure Limits STELs and TWAs

Calcium hydroxide (1305-62-0)

- U.S. Connecticut Hazardous Air Pollutants HLVs (30 min)
- U.S. Connecticut Hazardous Air Pollutants HLVs (8 hr)
- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Acceptable Ambient Concentrations
- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Emission Levels (ELs)
- U.S. Idaho Occupational Exposure Limits TWAs
- U.S. Massachusetts Right To Know List
- U.S. Michigan Occupational Exposure Limits TWAs
- U.S. Minnesota Hazardous Substance List
- U.S. Minnesota Permissible Exposure Limits TWAs
- U.S. New Hampshire Regulated Toxic Air Pollutants Ambient Air Levels (AALs) 24-Hour
- U.S. New Hampshire Regulated Toxic Air Pollutants Ambient Air Levels (AALs) Annual
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. North Dakota Air Pollutants Guideline Concentrations 8-Hour
- U.S. Oregon Permissible Exposure Limits TWAs
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Tennessee Occupational Exposure Limits TWAs
- U.S. Texas Effects Screening Levels Long Term and Short Term
- U.S. Vermont Permissible Exposure Limits TWAs
- U.S. Washington Permissible Exposure Limits STELs and TWAs
- U.S. Wisconsin Hazardous Air Contaminants All Sources Emissions From Stack Heights 25 Feet to Less Than 40 Feet
- U.S. Wisconsin Hazardous Air Contaminants All Sources Emissions From Stack Heights 40 Feet to Less Than 75 Feet
- U.S. Wisconsin Hazardous Air Contaminants All Sources Emissions From Stack Heights 75 Feet or Greater
- U.S. Wisconsin Hazardous Air Contaminants All Sources Emissions From Stack Heights Less Than 25 Feet

Canadian Regulations

TekFlex® Dry Spray	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects
	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
	-



Quartz (14808-60-7)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Listed on the Canadian Ingredient Disclosure List

WHMIS Classification Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

Calcium hydroxide (1305-62-0)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Listed on the Canadian Ingredient Disclosure List

WHMIS Classification Class E - Corrosive Material

03/01/2019 EN (English US) 7/8

Safety Data Sheet

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date : 03/01/2019

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA

Hazard Communication Standard 29 CFR 1910.1200 and the Hazardous Products Regulations

(WHMIS 2015).

GHS Full Text Phrases:

Carc. 1A	Carcinogenicity Category 1A
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Cuases serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H350	May cause cancer
H372	Causes damage to organs through prolonged or repeated exposure

Party Responsible for the Preparation of This Document

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North America GHS US 2012 & WHMIS