



Safety Data Sheet OptiFlo® Plus

Revision date: January 2, 2020

Section 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: OptiFlo® Plus (Midrange Water-Reducing and Retarding Concrete Admixture)
Synonyms: None
Chemical family: Retarder
Producer: Premiere Concrete Admixtures
508 Cedar Street
Pioneer, Ohio 43554
www.premiereadmix.com

Telephone: 419-737-9808 Available during normal business hours

Emergency: CHEMTREC 800-424-9300 Available 24 hours

Section 2. HAZARDS IDENTIFICATION

GHS Hazard Classification and Label Elements

DANGER — Causes serious eye damage (category 1)
Acute aquatic toxicity (category 3)
Chronic aquatic toxicity (category 3)
Acute toxicity, oral (category 5)



Hazard Statements

H303 May be harmful if swallowed
H318 Causes serious eye damage
H402 Harmful to aquatic life
H412 Harmful to aquatic life with long lasting effects

Precautionary Statements and Symptoms

P273+391 Avoid release to the environment and collect spillage.
P280: Wear eye and face protection. (see Section 8).
P310 If in eyes, immediately call a doctor and get medical advice/ attention.
P303+313 May be harmful if swallowed or in contact with skin.
P305 +P338+P351 If in eyes, rinse cautiously for several minutes, remove contact lenses if present and easy to do so, continue rinsing.
P501: Dispose of unusable contents and the container in accordance with local, state, provincial, and Federal regulations (see Section 13). Hazardous to the aquatic environment, long-term hazard.

Hazards not otherwise classified or not covered by GHS

Inhalation: May irritate the respiratory tract. Avoid breathing vapor or mist.

Ingestion: Ingestion is not anticipated in an industrial environment. If ingested, get immediate first aid (Section 4).

Skin contact: May irritate skin. Avoid prolonged or repeated skin contact.

Chronic: NA

Section 3. COMPOSITION / INFORMATION ON INGREDIENTS

Material information: (Does not include non-GHS regulated ingredients)

Name	CAS No.	Weight %
Nitrocalcite Tetrahydrate	13477-34-4	Less than 65%
Sodium Rhodanate	540-72-7	Less than 12%
Trihydroxyethylamine	102-71-6	Less than 5%

***Note:** The above weight percentages are represented in ranges as estimates. Due to variation among production batches, component percentages may vary.

Section 4. FIRST AID MEASURES

Inhalation: Move exposed persons to fresh air. If the person is not breathing or breathing is irregular, provide artificial respiration or oxygen by trained personnel. Seek medical attention.

Skin contact: Quickly remove contaminated clothing and shoes. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Get medical attention.

Ingestion: Do not induce vomiting unless instructed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. If conscious and alert, rinse mouth with water. Call a physician or poison control center immediately.

Eye contact: Check for and remove any contact lenses. Flushing eyes with tepid water lifting upper and lower lids for 15 minutes. Seek medical attention.

Section 5. FIREFIGHTING MEASURES

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.

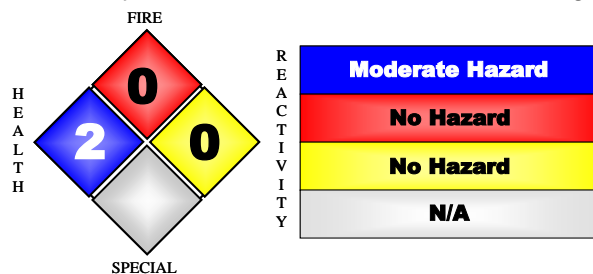
Specific hazards: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

Special protective equipment for firefighters: As with any fire, wear self-contained breathing apparatus and full protective gear.

NFPA rating: HMIS rating:

Health:	2	2
Flammability:	0	0
Instability/reactivity:	0	0
Other:	N/A	*(PPE)

***The customer is responsible for determining the PPE code for this material**



Section 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Immediately contact emergency personnel. Avoid mist formation. Avoid breathing vapors or mist. Ensure adequate ventilation.

Large Spill: Do not let product enter drains. Personnel must have appropriate training, per Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120.

Methods for Containment and Clean up | Avoid creating or breathing mist or vapors. Absorb with inert material and keep in a suitable, closed container for disposal. Wear personal protective equipment (Section 8).

Section 7. HANDLING AND STORAGE

Handling: | Keep containers closed when not in use. Avoid formation of mist and aerosols.
Storage: | Store in original container away from incompatible materials, direct sunlight, and food or drink. See Section 10. Keep from freezing. Keep container tightly closed until ready for use. Do not reuse the container. Average shelf life: 18 months.

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits:

Name	CAS No.	Exposure Limits TWA ^A		
		ACGIH® TLV®	Federal OSHA PELs	OSHA PELs 1989 ^B
Nitrocalcite Tetrahydrate	13477-34-4	Not Established	Not Established	Not Established
Sodium Rhodanate	540-72-7	Not Established	Not Established	Not Established
Trihydroxyethylamine	102-71-6	5 mg/m ³	Not Established	Not Established

All exposure limits listed are 8-hour time weighted average (TWA) — except where noted otherwise.

^A Time Weighted Average (TWA) is an average exposure over the course of an 8-hour work shift.

^B Federal OSHA 1989 PELs were vacated but are in use and enforced by many state OSHA plans.

Engineering measures: General ventilation is acceptable if exposure to materials in this section does not create symptoms listed in Section 2, or exceed exposure limits in this section. If exposure limits are exceeded, provide local exhaust ventilation according to general industrial hygiene practices.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection: When engineering controls are not sufficient to reduce exposure to levels below applicable exposure limits, seek professional advice prior to respirator selection and use.

Skin and body protection: Handle with impervious (nitrile, or PVC rubber) gloves. Choose body protection e.g. impervious apron, sleeves, coveralls, as specified by a PPE assessment and the amount of potential splash created.

Eye protection: Safety eyewear and face protection should be used when a PPE assessment indicates this is necessary to avoid exposure to liquid splashes, or mists.

Hygiene measures: Avoid skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities.

Other precautions: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking, and at the end of the work period.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Dark brown liquid
Physical state (solid/liquid/gas): Liquid
Substance type (pure/mixture): Mixture
Color: Dark brown

Odor:	Musty
Molecular weight:	Not available
pH:	3.0 to 7.0
Boiling point/range (5-95%):	212°F, 100°C
Melting point/range:	32°F, 0°C
Decomposition temperature:	Not available
Specific gravity:	1.27 to 1.31
Vapor density:	Not applicable
Vapor pressure:	Not applicable
Evaporation rate (Butyl acetate= 1):	Not applicable
Flash point, method used:	Not applicable
Water solubility:	100 %
VOC Content:	0 %
Auto-ignition temperature:	Material is not self-igniting
Flammable limits in air — lower (%):	Not applicable
Flammable limits in air — upper (%):	Not applicable

Section 10. STABILITY AND REACTIVITY

Reactivity:	Under normal conditions of storage and use, hazardous reactions will not occur.
Stability:	The material is stable.
Possibly hazardous reactions:	None known
Conditions to avoid:	No specific data
Incompatible Materials:	Strong acids, strong bases, strong oxidizing agents.
Hazardous decomposition products:	No specific data
Polymerization:	Will not occur.

Section 11. TOXICOLOGICAL INFORMATION

Acute toxicity: No toxicity data is available for the product as a mixture. The following component data is provided.

Product information:

Name	CAS No.	Inhalation:	Dermal:	Oral:
Nitrocalcite Tetrahydrate	13477-34-4	Not available	Rabbit: No skin irritation Eyes: Rabbit serious eye damage.	Acute LD ₅₀ (Rat):300 to 3,900 mg/kg
Sodium Rhodanate	540-72-7	Not available	Not available	Acute LD ₅₀ (Rat):764 mg/kg
Trihydroxyethylamine	102-71-6	Not available	Acute LD ₅₀ (Rabbit):>2,000 mg/kg	Acute LD ₅₀ (Rat):6,400 mg/kg

Chronic toxicity: Ingredients are not listed by the NTP, OSHA, or EPA as carcinogenic. Triethanolamine is identified by the IARC as category 3: unclassifiable as to carcinogenicity in humans.

Sensitization: No data

Section 12. ECOLOGICAL INFORMATION

Ecotoxicity effects:	Nitrocalcite Tetrahydrate LC ₅₀ – Oncorhynchus mykiss (rainbow trout) >98.9 mg/liter – 96 hour <u>Sodium Rhodanate</u> LC ₅₀ – Oncorhynchus mykiss (rainbow trout) >233 mg/liter – 96 hour
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	<p>EC₅₀ – Daphnia magna (water flea) 11 mg/liter 48 hour <u>Trihydroxyethylamine</u> Acute EC₅₀ ASTM; 48 hours/static. Daphnia 609.88 mg/liter. Chronic NOEC; (no official guidelines) 21 days. Daphnia 16 mg/liter. EC₅₀; 24 hours Daphnia magna (Water flea): 4.40 – 5.30 mg/liter</p>
Bioaccumulative Potential:	<p><u>Trihydroxyethylamine</u> Log P_{ow}: -2.3; BCF: <3.9; Potential: low.</p>
Persistence and degradability:	No data available
Mobility in Soil:	<p><u>Trihydroxyethylamine</u>: Soil/water partition coefficient (K_{oc}): 10.</p>

Section 13. DISPOSAL CONSIDERATIONS

Disposal considerations: Generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safety way. Empty containers or liners may retain some product residues. Dispose in accordance with state/ provincial, and local regulations.

Section 14. TRANSPORT INFORMATION

Please refer to DOT regulation 49 CFR 172.101:
Transport information: Not regulated for transport.
Hazardous Materials Description: (DOT and IATA): None.
UN/identification no.: None.
Proper shipping name: None.
Hazard class: None.
Packing group: None.
DOT reportable quantity (lbs.): None.

Section 15. REGULATORY INFORMATION

U.S. federal regulatory information:

State and community right-to-know regulations:
The following component(s) of this material are identified on the regulatory lists below:

U.S. TSCA Chemical inventory Section 8(b), AICS (Australia), DSL (Canada):
 Triethanolamine, CAS Number 102-71-6, is listed in TSCA, AICS, and DSL.

OSHA — This product is determined to be hazardous as defined in the OSHA Hazard Communications Standard.

CERCLA Sections 102a/103 (40 FR 302.4):

<u>Component</u>	<u>Reportable Quantity</u>
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Some Components of this product are listed in the following sections of **SARA**:
 SARA Title III Section 302 — Not applicable
 SARA Title III Section 304 — Not applicable
 SARA Title III Section 313 — Calcium nitrate tetrahydrate is subject to reporting.
 SARA Title III Sections 311/312 Hazardous Categories (40 CFR 370.21)
 Acute health hazard: Yes
 Chronic health hazard: Yes

Fire hazard: No
Reactive Hazard: No
Pressure Hazard: No

RCRA Regulated Components: None

Marine Pollutant: Not listed

State Regulations: Triethanolamine, CAS Number 102-71-6, appears on the following state hazardous substance lists: RI, MN, MA and PA. Check individual state requirements.

California Proposition 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

INTERNATIONAL REGULATIONS

Identification According to EEC Directives: None

WHMIS (Canada)

Classification: Not controlled.

***NOTE:** User must consult with applicable state and local agencies for special specifics, determinations or compliance obligations regarding this product.*

Section 16. OTHER INFORMATION

The information and recommendations contained herein are based upon tests, data, and information resources believed to be reliable. However, **Premiere Concrete Admixtures (Premiere)** does not guarantee the accuracy or completeness, nor shall any of this information constitute a warranty, representation, or license of any kind, whether expressed or implied, as to the safety of goods, the merchantability of the goods or the fitness of the goods for a particular purpose. **Premiere** assumes no responsibility for injuries proximately caused by use of the Materials if reasonable safety procedures are not followed as stipulated in this Safety Data Sheet. Additionally, **Premiere** assumes no responsibility for injuries proximately caused by abnormal use of the Material even if reasonable safety procedures are followed. The buyer assumes the risk in its use of the Material.