

SAFETY DATA SHEET

SECTION 1 Product And Company Identification

PRODUCT

PRODUCT NAME: 3440 TIME EVAPORATION RETARDANT
PRODUCT DESCRIPTION: Preparation/Mixture
PRODUCT USE: For helping produce high quality concrete flatwork by minimizing the evaporation of moisture from the surface of newly placed concrete, extending both workability

MANUFACTURER INFORMATION

INNOVATIVE MANUFACTURING INC
 861 DERWENT WAY
 DELTA, BC, CANADA, V3M 5R4
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EMERGENCY INFORMATION

INNOVATIVE MANUFACTURING CONTACT: 1-800-667-8246
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Section 2 – Hazards Identification

Classification of the substance or mixture

GHS Classification

Skin corrosive/irritation Category 2
 Serious eye damage/eye irritation Category 2A

Label elements

Hazard pictogram(s)



Signal word Warning

Hazard Statement: H315 Causes skin irritation.
 H319 Causes serious eye irritation.

Precautionary Statements:

Prevention P264 Wash hands thoroughly after handling.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response 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.
 P332 + P313 If skin irritation occurs: Get medical advice/attention.
 P337 + P313 If eye irritation persists: Get medical advice/attention.
 P362 Take off contaminated clothing and wash before reuse.

Storage

Disposal

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC)

Not applicable

Unknown acute toxicity

0% of the mixture consists of ingredients(s) of unknown toxicity

Other hazards

Spillages may be slippery.

Section 3 – Composition/Information on Ingredients

COMPONENTS	CAS No.	% BY WEIGHT
Water	7732-18-5	95-99
1-Hexadecanol	36653-82-4	1-5

Section 4 – First Aid Measures**Description of First Aid Measures**

Eye Contact	Immediately flush eyes with plenty of cool water for at least 20 minutes, occasionally lifting the eye lids to ensure thorough rinsing. Get medical attention if irritation persists.
Skin Contact	Wash thoroughly with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. In the case of skin irritation or allergic reactions see a physician.
Inhalation	Move to fresh air in case of accidental inhalation of vapors. If continued difficulty with breathing is experienced, get immediate medical attention.
Ingestion	If swallowed, do not induce vomiting. Get immediate medical attention. Never give anything by mouth to an unconscious person.
Self-protection of the first aider	Pay attention to self-protection.

Most important symptoms and effects, both acute and delayed

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed

Immediately seek medical advice or attention if symptoms are significant or persist.

Note to physicians Treat symptomatically

Section 5 – Fire Fighting Measures**Extinguishing media**

Suitable extinguishing media	Compatible with all standard fire fighting techniques.
Unsuitable extinguishing media	None known.

Special hazards arising from the substance or mixture

Hazardous combustion products	Not applicable. Aqueous solution. Non-combustible.
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Advice for firefighters None

Section 6 – Accidental Release Measures**Personal precautions, protective equipment, and emergency procedures**

Evacuate area and keep unnecessary and unprotected personnel from entering the spill area. Use proper personal protective equipment as listed in Section 8.

Environmental precautions Do not allow to enter drains, sewers or watercourses. Advise authorities if spillage has entered water course or sewer or has contaminated soil or vegetation.

Methods and materials for containment and cleaning up

Methods for containment	Contain spills with an inert absorbent material such as soil or sands. Prevent from spreading by covering, diking or other means. Provide ventilation.
Methods for cleaning up	Clean up spills immediately observing precautions in the protective equipment section. Place into a suitable container for disposal. Provide ventilation. After removal, flush spill area with soap and water to remove trace residue.

Reference to other sections

See Section 8. Exposure controls and personal protection.

Section 7 – Handling and Storage**Precautions for safe handling**

Avoid contact with eyes, skin and clothing. Avoid generation of mist. Provide adequate ventilation. Emergency shower and eyes wash facilities should be readily available. Wear protective equipment to comply with good occupational hygiene practice. Do not eat, drink or smoke at the work place. See also Section 8.

Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions	Keep at a temperature not exceeding 50°C. Do not allow material to freeze. Provide an adequate bund wall. Unsuitable containers: aluminum. See also Section 10.
Incompatible Products	Aluminum, zinc, tin and their alloys. Acids. Sugar residues.

Specific end use(s)

Not applicable.

Section 8 – Exposure Controls / Personal Protection**Control Parameters**

Exposure Guidelines	Country specific exposure limits have not been established or are not applicable unless listed below.
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Components	ACGIH TLV	OSHA PEL	NIOSH REL

Exposure controls

Engineering Controls	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective
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Individual protection measures, such as personal protective equipment

Eye/Face Protection	Wear appropriate protective glasses or splash goggles as described by 20 CFR1910.133, OSHA eye and face protection regulation, or the European standard EN 166.
Skin/Body Protection	Chemical-resistant gloves and chemical goggles, face-shield and synthetic apron or coveralls should be used to prevent contact with eyes, skin or clothing.
Respiratory Protection	Respiratory protection not normally required. Advice on respiratory protective equipment is given in the HSE (Health and Safety Executive) publication HS(G) 53.
Other Protective	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
Environmental Exposure Controls	Avoid release to the environment.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice.

Section 9 – Physical and Chemical Properties

Information on basic physical and chemical properties

	PRODUCT CRITERIA
PHYSICAL STATE	Liquid
APPEARANCE - COLOR	Light blue suspension
ODOR	Odourless
ODOR THRESHOLD	No data available
PH	4.5
MELTING POINT/FREEZING POINT	< 0°C
INITIAL BOILING POINT AND BOILING RANGE	> 100°C
FLASH POINT	No data available
EVAPORATION RATE	No data available
FLAMMABILITY (solid, gas)	No data available
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS	No data available
VAPOR PRESSURE	No data available
VAPOR DENSITY (AIR=1)	No data available
SPECIFIC GRAVITY (@25°C)	1.00
SOLUBILITY	Soluble.
PARTITION COEFFICIENT: n-OCTANOL / WATER	No data available
AUTO IGNITION TEMPERATURE	No data available
DECOMPOSITION TEMPERATURE	No data available
VISCOSITY	No data available
EXPLOSIVE PROPERTIES	No data available
OXIDISING PROPERTIES	No data available

Other information

VOC 0 g/L

Section 10 – Stability and Reactivity

Reactivity	See Possibility of Hazardous Reactions(Below)
Chemical Stability	Stable under recommended storage and handling conditions.
Possibility of Hazardous Reactions	When arc welding vessels containing aqueous solutions of this materials, take care to control any explosion risk from hydrogen evolved by electrolysis. This product will react with aluminum, zinc, tin and their alloys evolving hydrogen gas which can form an explosive mixture with air. Can react violently if in contact with acids. Can react with sugar residues to form carbon monoxide.
Conditions to Avoid	See Possibility of Hazardous Reactions(above).
Incompatible materials	See Possibility of Hazardous Reactions(above).
Hazardous Decomposition Products	None known.

Section 11 – Toxicological Information

GHS Required Criteria	Toxicity Criteria	Toxicity Information	Comments	Chemical Constituent
Acute Toxicity	LD50 (Oral/Rat)	5000 mg/kg		1-Hexadecanol 36653-82-4
	LC50 (Inhalation/Rat male)	-		
	LD50 (Dermal/Rabbit)	2600 mg/kg		
Skin corrosion/irritation	Repeated and /or prolonged contact may cause slight skin irritation.			
Serious Eye Damage / Eye Irritation	Liquid or mist may cause discomfort and mild irritation.			
Respiratory or Skin Sensitization	Not classified			
Germ Cell Mutagenicity	No evidence of mutagenic effects			
Carcinogenicity	Not classified			
Reproductive Toxicity	No evidence of reproductive effects			
STOT - Single Exposure	Not classified			
STOT - Repeated Exposure	Based on available data, not expected			
Aspiration Hazard	Not classified			

Section 12 – Ecological Information**Ecotoxicity**

The environmental impact of this product has not been fully investigated.

ECOTOXICITY DATA

Ecotoxicity	Chemical Name	
Toxicity to algae	EC50 / 96 h or 72 h	-
	NOEC / 96 h or 72 h	-
	M factor	-
Toxicity to fish	LC 50 / 96 h	
	NOEC / 21 days	-
	M factor	-
Toxicity to Daphnia	LC50 / 48 h	
	NOEC / 21 days	-
	M factor	-

Persistence and Degradability

No further relevant information available.

Bioaccumulative potential

Product/Ingredient Name	Log P _{ow}	BCF	Potential

Mobility in Soil

No further relevant information available.

Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

Other Adverse Effects

No further relevant information available.

Additional information

Avoid release to the environment.

Section 13 – Disposal Considerations**Waste treatment methods**

Waste Disposal	Dispose of waste according to local, state/provincial, and federal requirements.
Contaminated Materials	Disposal must be made in accordance with local, state and federal regulations.
Container Disposal	Disposal must be made in accordance with local, state and federal regulations.
Recommended cleaning agent	Water, if necessary with cleansing agents.

Section 14 – Transportation Information

DOT	Not Regulated as a hazardous material for transport
TDG	Not Regulated as a hazardous material for transport
IATA	Not Regulated as a hazardous material for transport
IMDG	Not Regulated as a hazardous material for transport

Section 15 – Regulatory Information**Safety, Health and Environmental Regulations/Legislations Specific for the Chemical****Canada**

WHMIS Classification: This document complies with the WHMIS requirements of the HPA and the CPR.

US Federal Information

SARA 302/311/312/313 Components No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302, 311, 312 or 313.

RCRA	Not classified as a hazardous substance under the Resource Conservation and Recovery Act, or its regulations, 40 CFR.261.
CERCLA	Not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR.302.
Emergency Planning and Community Right-to-Know Act (SARA Title III):	Not an extremely hazardous substance under Section 302 and is not a toxic chemical subject to the requirements of Section 313.
NTP	Not classified.
OSHA Carcinogen	Not listed.
State Right to Know Laws	
	California Prop. 65 Components
	Warning: This product does not contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Global Inventories

DSL: All components of this product are on the Canadian DSL list.

TSCA No: All constituents are listed in the TSCA inventory.

Section 16 – Other Information**HMIS Rating:**

Health	1
Flammability	0
Physical Hazard	0
Personal Protection	x

NFPA Rating:

Health	1
Flammability	0
Instability	0
Special	-

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Prepared By:

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