



OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 03/10/2024 – **Clear Flow**

# SAFETY DATA SHEET (SDS)

## 1. IDENTIFICATION

### Product Identifier

**Trade name:** Clear Flow

**Relevant identified uses of the substance or mixture and uses advised against:**

No further relevant information

**Product Description:** Irrigation Systems Optimizer

### Details of the Supplier of the Safety Data Sheet

**Manufacturer/Supplier:** EPM (Environmental Plant Management)  
24026 West Oakwood Lane  
Kansasville, WI 53139

**Phone:** 414-667-0079  
[www.epmearth.com](http://www.epmearth.com)

**Emergency telephone number:** 414-667-0079

## 2. HAZARD(S) IDENTIFICATION

### Classification of the

**substance or mixture:** The product does not need classification according to OSHA HazCom Standard 29 CFR paragraph (d) of §1910.1200(g) and GHS Rev 03.

### Label Elements

**GHS label elements:** Non-Regulated Material

**Hazard pictograms:** Non-Regulated Material

**Signal word:** Non-Regulated Material

**Hazard statements:** Non-Regulated Material

**Unknown acute toxicity:** This value refers to knowledge of known, established toxicological or ecotoxicological values. 19% of the mixture consists of component(s) of unknown toxicity.

## Classification system:

NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme



**NFPA ratings (scale 0 - 4)**

**Health = 0 Fire = 0 Reactivity = 0**



**HMIS-ratings (scale 0 - 4)**

**Health = 0 Fire = 0 Reactivity = 0**

**Hazard(s) not otherwise classified (HNOC):**

**Chemical characterization:**

**Description:**

None known

Mixtures

Mixture of substances listed below with non-hazardous additions.

Dangerous Components:		
Trade Secret	Acute Tox. 4, H302; STOT SE 3, H335; Eye Irrit. 2B H320	2-12%
Trade Secret	Eye Irrit. 2A, H319	≤ 2.5%

**Additional information:**

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets. Trade secret made in accordance with paragraph (i) of §1910.1200 of 29 CFR 1910.1200, the OSHA Hazard Communication Standard and U.S. Code of Federal Regulations.

## 3. FIRST-AID MEASURES

### First Aid Measures

**General information:**

Wear protective eye wear, mask and gloves

**After inhalation:**

Supply fresh air. If symptoms persist seek medical advice

**After skin contact:**

If skin irritation occurs, seek medical advice

**After eye contact:**

Rinse opened eye with water for 15 minutes. If symptoms persist, seek medical advice.

**After swallowing:**

If swallowed and symptoms occur, seek medical advice

### Information for doctor

**Most important symptoms and effects, both acute and delayed:**

No further relevant information available

**Indication of any immediate medical attention and special treatment needed:**

No further relevant information available

## 4. FIRE-FIGHTING MEASURES

### Extinguishing Media

<b>Suitable extinguishing agents:</b>	CO <sub>2</sub> , extinguishing powder or water spray. Fight larger fires with water spray or foam
<b>Special hazards arising from the substance or mixture:</b>	No further relevant information available
<b>Protective equipment:</b>	As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes

## 5. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions, protective equipment and emergency procedures:</b>	Not required						
<b>Environmental precautions:</b>	No special measures required						
<b>Methods and material for containment and cleaning up:</b>	Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust). Dispose of the collected material according to regulations						
<b>Reference to other sections:</b>	See Section 6 for information on safe handling. See Section 7 for information on personal protection equipment. See Section 12 for disposal information.						
<b>Protective Action Criteria for Chemicals:</b>	<table><tr><td><b>PAC-1: Trade Secret</b></td><td>61 mg/m<sup>3</sup></td></tr><tr><td><b>PAC-2: Trade Secret</b></td><td>680 mg/m<sup>3</sup></td></tr><tr><td><b>PAC-3: Trade Secret</b></td><td>810 mg/m<sup>3</sup></td></tr></table>	<b>PAC-1: Trade Secret</b>	61 mg/m <sup>3</sup>	<b>PAC-2: Trade Secret</b>	680 mg/m <sup>3</sup>	<b>PAC-3: Trade Secret</b>	810 mg/m <sup>3</sup>
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## 6. HANDLING AND STORAGE

### Handling

<b>Precautions for safe handling:</b>	No special measures required.
<b>Information about protection against explosions and fires:</b>	No special measures required

### Conditions for transport, including any incompatibilities

<b>Temperature:</b>	Transport in temperatures above freezing and below temperatures of 140°F / 60°C
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### Storage

<b>Requirements to be met by storerooms and receptacles:</b>	Store in a cool, dry place. Store above 32°F and below 110°F
<b>Information about storage in one common storage facility:</b>	Not required
<b>Further information about storage conditions:</b>	None
<b>Specific end use(s):</b>	No further relevant information available

## 7. EXPOSURE CONTROLS/PERSONAL PROTECTIONS

### Additional information about design of technical systems:

No further data; see section 6

### Control Parameters

### Components with occupational exposure limits:

No further relevant information available

### Protective equipment:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace

### Additional information:

The lists that were valid during the creation of this SDS were used as basis

### Exposure controls

### Personal protective equipment:

Wear mask, gloves and eyewear.

### General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed

### Breathing equipment:

Wear a suitable mask for mist and overspray

### Protection of hands:

Wear gloves

### Material of gloves:

Rubber, latex or water resistant

### Penetration time of glove material:

Not applicable.

### Eye protection:

Eyewear suitable to protect from mist or overspray.

## 8. PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

#### General Information

Appearance	
Form:	Liquid
Color:	Amber
Odor:	Sharp vinegar-like smell
Odor threshold:	Not determined
pH-value:	4.5 – 5.0

<b>Change in condition:</b>	
<b>Melting point/Melting range:</b>	<b>Not determined</b>
<b>Boiling point/Boiling range:</b>	<b>100 °C (212 °F)</b>
<b>Flash point:</b>	<b>None</b>
<b>Flammability (solid, gaseous):</b>	<b>Not applicable</b>
<b>Ignition temperature:</b>	<b>Not applicable</b>
<b>Decomposition temperature:</b>	<b>Not determined</b>
<b>Auto igniting:</b>	<b>Product is not self-igniting</b>
<b>Danger of explosion:</b>	<b>Product does not present an explosion hazard</b>
<b>Explosion limits:</b>	<b>Not determined</b>
<b>Lower:</b>	<b>Not determined</b>
<b>Upper:</b>	<b>100 °C (212 °F)</b>
<b>Vapor pressure @ 20 °C (68 °F):</b>	<b>23 hPa (17 mm Hg)</b>
<b>Density:</b>	
<b>Relative density:</b>	<b>Not determined</b>
<b>Vapor density:</b>	<b>Not determined</b>
<b>Evaporation rate:</b>	<b>Not determined</b>
<b>Solubility in / Miscibility with:</b>	
<b>Water:</b>	<b>Soluble</b>
<b>Partition coefficient (n-octanol/water):</b>	<b>Not determined</b>
<b>Viscosity:</b>	
<b>Dynamic:</b>	<b>Not determined</b>
<b>Kinematic:</b>	<b>Not determined</b>
<b>Solvent content:</b>	
<b>Organic solvents:</b>	<b>0.0%</b>
<b>Water:</b>	<b>78.4%</b>
<b>Solids content:</b>	<b>21.6%</b>
<b>Other information:</b>	<b>No further relevant information available</b>

## 9. STABILITY AND REACTIVITY

<b>Reactivity:</b>	No further relevant information available
<b>Chemical stability:</b>	Stable under normal conditions.
<b>Thermal decomposition / conditions to be avoided:</b>	None, if used according to specifications
<b>Possibility of hazardous reactions:</b>	No dangerous reactions known
<b>Conditions to avoid:</b>	No further relevant information available
<b>Incompatible materials:</b>	No further relevant information available
<b>Hazardous decomposition products:</b>	No dangerous decomposition products known

## 10. TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects

#### Acute toxicity

**LD/LC50 values that are relevant for classification:**

**Trade Secret:**

Oral	LD50	1600 mg/kg (Mouse)
		4070 mg/kg (Rat)
		2000 mg/kg (Rabbit)
Oral	LD50	8000 mg/kg (Rat)

#### Primary Irritant Effect

**On the skin:** No irritating effect

**On the eye:** No irritating effect

#### Additional toxicological

**information:**

The product is not subject to classification according to internally approved calculation methods for preparations.  
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

#### Carcinogenic Categories

**IARC (International Agency for Research on Cancer):** None of the ingredients are listed

**NTP (National Toxicology Program):** None of the ingredients are listed

**OSHA-Ca (Occupational Safety & Health Administration):** None of the ingredients are listed

## 11. ECOLOGICAL INFORMATION

### Toxicity

**Aquatic toxicity:** No further relevant information available

**Persistence and degradability:** No further relevant information available

### Behavior in environmental systems

**Bio-accumulative potential:** No further relevant information available

**Mobility in soil:** No further relevant information available

### Results of PBT and vPvB assessment

**vPvB:** Not applicable

**Other adverse effects:** No further relevant information available

## 12. DISPOSAL CONSIDERATIONS

### Waste treatment methods

**Recommendation:** Smaller quantities can be disposed of with household waste. Observe all federal, state and local environmental regulations when disposing of this material.

### Uncleaned packaging's

**Recommendation:** Disposal must be made according to official regulations.

## 13. TRANSPORT INFORMATION

### UN-Number

**DOT, ADR/ADN, ADN, IMDG, IATA:** Non-Regulated Material

### UN proper shipping name

**DOT, ADR/ADN, ADN, IMDG, IATA:** Non-Regulated Material

### Transport hazard class(es)

**DOT, ADR/ADN, ADN, IMDG, IATA:**

**Class:** Non-Regulated Material

### Packing Group

**DOT, ADR/ADN, IMDG, IATA:** Non-Regulated Material

**Environmental hazards:** Not applicable

**Special precautions for user:** Not applicable

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:**

Not applicable

**UN "Model Regulation":** Non-Regulated Material

## 14. REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture:**

**SARA (Superfund Amendments and Reauthorization):**

**Section 355**

**(extremely hazardous substances):** None of the ingredients are listed

**Section 313**

**(Specific toxic chemical listings):** None of the ingredients are listed

**TSCA**

**(Toxic Substances Control Act):** Trade Secret  
Trade Secret  
Trade Secret

**7732-18-5:** Water, distilled water, deionized water

**California Proposition 65:**

**Chemicals known to cause cancer:** None of the ingredients are listed

**Chemicals known to cause reproductive toxicity for females:** None of the ingredients are listed

**Chemicals known to cause reproductive toxicity for males:** None of the ingredients are listed

**Chemicals known to cause developmental toxicity:** None of the ingredients are listed

**New Jersey Right-to-Know List:** None of the ingredients are listed

**Pennsylvania Right-to-Know List:** None of the ingredients are listed

**Pennsylvania Special**

**Hazardous Substance List:** None of the ingredients are listed

**Carcinogenic categories:**

**EPA**

**(Environmental Protection Agency):** None of the ingredients are listed

**TLV (Threshold Limit Value established by ACGIH):**

None of the ingredients are listed

**NIOSH-Ca (National Institute for**

**Occupational Safety and Health):** None of the ingredients are listed

**GHS label elements:** Non-Regulated Material

**Hazard pictograms:** Non-Regulated Material

**Signal word:** Non-Regulated Material

**Hazard statements:** Non-Regulated Material

**National regulations:** The product is subject to be classified according with the latest version of the regulations on hazardous substances.

**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out



## 15. OTHER INFORMATION

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

<b>Date of preparation:</b>	03.10.2024
<b>Abbreviations and acronyms:</b>	
<b>ADR:</b>	The European Agreement concerning the International Carriage of Dangerous Goods by Road
<b>ADN:</b>	The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
<b>IMDG:</b>	International Maritime Code for Dangerous Goods
<b>DOT:</b>	US Department of Transportation
<b>IATA:</b>	International Air Transport Association
<b>ACGIH:</b>	American Conference of Governmental Industrial Hygienists
<b>EINECS:</b>	European Inventory of Existing Commercial Chemical Substances
<b>ELINCS:</b>	European List of Notified Chemical Substances
<b>CAS:</b>	Chemical Abstracts Service (division of the American Chemical Society)
<b>NFPA:</b>	National Fire Protection Association (USA)
<b>HMIS:</b>	Hazardous Materials Identification System (USA)
<b>LC50:</b>	Lethal concentration, 50 percent LD50: Lethal dose, 50 percent
<b>PBT:</b>	Persistent, Bio-accumulative and Toxic
<b>vPvB:</b>	very Persistent and very Bio-accumulative
<b>NIOSH:</b>	National Institute for Occupational Safety and Health
<b>OSHA:</b>	Occupational Safety & Health Administration
<b>TLV:</b>	Threshold Limit Value
<b>PEL:</b>	Permissible Exposure Limit
<b>REL:</b>	Recommended Exposure Limit
<b>Acute Tox. 4:</b>	Acute toxicity – Category 4
<b>Eye Irrit. 2A:</b>	Serious eye damage/eye irritation – Category 2A
<b>Eye Irrit. 2B:</b>	Serious eye damage/eye irritation – Category 2B
<b>STOT SE 3:</b>	Specific target organ toxicity (single exposure) – Category 3