

## Section 1 Chemical Product and Company Identification

**Product Identifier** MiraMag® AquaMulsion® II Developer  
**Product Number** IR-CHE8565, IR-CHE8566  
**General Use** Developing images on pre-sensitized metal  
**Company Address** UEI Systems®, a UEI Group Company  
 9090 Nieman Road  
 Overland Park, KS 66214 USA  
**Phone** +1 800 221 9059 or +1 913 541 0503  
**Emergency Contact Number** CHEMTEL – Available 24 hours/day, 7 days/week  
 Domestic North America: +1 800 255 3924  
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## Section 2 Hazards Identification

### GHS Classification

Hazard Class	Hazard Category	Route of Exposure
Eye Irritation	2A	–

### GHS Labeling

**Contains** Sodium Carbonate (497-19-8)



**Warning**

**Hazard Statements** Causes serious eye irritation  
**Precautionary Statements** Wash hands thoroughly after handling  
 Wear eye protection/face protection  
**Response** **If In Eyes:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
**If Eye Irritation Persists:** Get medical advice/attention.  
**Specific treatment** Dilute with 4 to 8 ounces of water may be useful if it can be performed shortly after ingestion in patients.  
**Storage** Store locked up.  
**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations

## Section 3 Hazardous Ingredients / Identity Information

Hazardous Components	CAS No.	%
Sodium Carbonate	497-19-8	<100

## Section 4 First Aid Measures

<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
<b>Eye Contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
<b>Skin Contact</b>	Wash off with soap and plenty of water. Consult a physician.

## Section 5 Firefighting Measures

<b>Flammable/Combustible Properties</b>	This product does not present fire or explosion hazards as shipped.
<b>Fire/Explosion</b>	No data available
<b>Extinguishing Media</b>	Use extinguishing media appropriate to the surrounding fire conditions.
<b>Firefighting Equipment/Instructions</b>	Firefighters should wear NIOSH-approved, positive pressure, self-contained breathing apparatus and full protective clothing when appropriate.

## Section 6 Accidental Release Measures

<b>Personal Precautions</b>	Wear gloves and approved respiratory protection if possibility of dust, mist and fume exposure exists.
<b>Environmental Precautions</b>	Ensure compliance with local, state and federal regulations in the use of any waste containment program. Do not let product enter drains.
<b>Methods for Cleaning Up</b>	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## Section 7 Handling and Storage

Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Keep product in a tightly closed container and store in a cool, dry place. Product is hygroscopic.

## Section 8 Component Exposure Limits

	Contains no substances with occupational exposure limit values
<b>Appropriate Engineering Controls</b>	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
<b>Personal Respiratory Protection</b>	Use NIOSH/MSHA approved dust respirator to avoid excessive inhalation of dust, fume or mist.
<b>Protective Hand Protection</b>	Use protective gloves
<b>Eye Protection</b>	Use safety glasses

## Section 9 Physical and Chemical Properties

<b>Appearance and Odor</b>	White/off-white granular powder with no odor	<b>Odor Threshold</b>	No data
<b>pH</b>	11.4 (1% solution)	<b>Boiling Point</b>	2,912° F (1,600° C)
<b>Melting Point Range</b>	1,564° F (851° C)	<b>Solubility (H<sub>2</sub>O)</b>	217 g/l at 20° C (68° F) - completely soluble
<b>Specific Gravity</b>	2.509	<b>Density</b>	2.532 g/cm <sup>3</sup>
<b>Octanol/H<sub>2</sub>O Coefficient</b>	No data	<b>Evaporation Rate</b>	No data
<b>Molecular Weight</b>	105.99	<b>Decomposition Temperature</b>	752° F (400° C)
<b>Auto Ignition</b>	No data	<b>Lower Flammability Limit</b>	No data
<b>Flash Point</b>	No data	<b>Upper Flammability Limit</b>	No data
<b>Vapor Density</b>	No data	<b>Vapor Pressure</b>	No data
<b>VOC</b>	No data	<b>Flammability Class</b>	No data
<b>Viscosity</b>	No data		

## Section 10 Chemical Stability and Reactivity

<b>Stability</b>	Stable under normal handling conditions. Substance is hygroscopic.
<b>Conditions to Avoid</b>	Aluminum powder, acids, fluorine, molten lithium
<b>Incompatibility</b>	Strong acids
<b>Hazardous Decomposition/ By-Products</b>	Begins to decompose at 400° C. Begins to emit carbon dioxide gas and toxic fumes of Na <sub>2</sub> O.
<b>Hazardous Polymerization</b>	Will not occur

## Section 11 Toxicological Information

<b>Likely Routes of Exposure</b>	Sodium carbonate may cause irritation after eye exposure.
<b>Acute Effects</b>	
<b>Inhalation LC50</b>	Rat - 2h 5,750 mg/l
<b>Eye Contact</b>	Rabbit Result: Eye irritation - 24 h
<b>Skin Contact</b>	Rabbit Result: Mild skin irritation - 24 h
<b>Ingestion LD50</b>	LD50 Oral (rat, male and female) 4,090 mg/kg
<b>Sensitization</b>	No data available
<b>Carcinogenicity</b>	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, ACGIH, NTP or OSHA.
<b>Target Organ Effects</b>	No data available
<b>Reproductive Toxicity</b>	No data available
<b>Teratogenicity</b>	No data available

## Section 12 Ecological Information

### Ecotoxicity

#### Toxicity to Fish LC50

Component	Species	Exposure Time	LC50/EC50/IC50
Sodium Carbonate (497-19-8)	<i>Lepomis macrochirus</i> (bluegill)	96 hrs	LC50 210 mg/l
	<i>Daphnia magna</i> (water flea)	48 hrs	EC50 265 mg/l

Persistence/Degradability No data available

Bioaccumulative Potential No data available

Mobility in Soil No data available

## Section 13 Disposal Considerations

**Disposal Instructions** Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste.

## Section 14 Transportation Information

This material is not regulated under DOT provisions.

## Section 15 Regulatory Information

Component	SARA <sup>1</sup>	SARA <sup>1</sup> EHS	RCRA <sup>2</sup>	CERCLA <sup>3</sup>	CERCLA <sup>3</sup> RQ	TSCA <sup>4</sup>
Sodium Carbonate	Not listed	Not listed	Not listed	Not listed	None	Listed

### Component Analysis – State

Component	CA	MA	MN	NJ	PA	RI
Sodium Carbonate (497-19-8)	N	N	N	N	N	N

**California Prop 65** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## Section 16

## Other Information

UEI Systems® provides the information contained herein in good faith. It is believed to be correct. However it is not all-inclusive and should be used only as a guide. Individuals receiving this information must exercise their independent judgement in determining its appropriateness for a particular purpose. UEI Systems shall not be held liable for any damage resulting from handling or from contact with this product. All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources.

**Abbreviations**    **PEL**   Permissible Exposure Limit  
                          **TLV**   Threshold Limit Value

**End Notes**

1. SARA - Signed into law in 1986, the Superfund Amendments and Reauthorization Act (SARA) is an extension of CERCLA, and is intended to encourage and support local and state emergency planning efforts. SARA provides citizens and local governments with information about potential chemical hazards, and calls for facilities that store hazardous materials to provide officials and citizens with data on the type and amount on hand at specific locations. This field states whether a material is listed or not listed in section 372.65 of SARA. EHS - This states if a material is listed or not listed in Appendix B to part 355, the SARA Extremely Hazardous Substances (EHS) section. RQ is the reportable quantity. TPQ is the Threshold Planning Quantity.
2. RCRA - The Resource Conservation and Recovery Act enacted in 1976 and subsequently amended, controls solid-waste disposal and encourages recycling. This states whether a material is listed or not listed under this regulation. If listed the Hazardous Waste Number and waste characterization assigned by RCRA is also provided.
3. CERCLA - Enacted in 1980 and amended thereafter, the Comprehensive Environmental Response, Compensation, and Liability Act provides for identification and cleanup of hazardous materials released on land, into the air, waterways, and groundwater. It covers areas affected by newly released materials and older leaking or abandoned dump sites. This states whether a material is listed or not listed in CERCLA Table 302.4. If listed the section(s) that it is listed under and the Reportable Quantity (RQ) are also provided.
4. TSCA - The Toxic Substances Control Act controls the exposure to and use of raw industrial chemicals not subject to other laws. This states whether the chemical is listed or not listed under this regulation.

**Revision**    21 April 2020  
**Supersedes**    8 May 2015  
**Evidence**    <http://toxnet.nlm.nih.gov/cgi-bin/sis/search2/f?./temp/~gm94di:3>  
                      <http://chem.sis.nlm.nih.gov/chemidplus/rn/497-19-8>