

## 1. Product and Company Identification

<b>Product identifier</b>	<b>Glisten Dishwasher Magic Machine Cleaner</b>
<b>Other means of identification</b>	Not available
<b>Recommended use</b>	Dishwasher Cleaner and Disinfectant
<b>Recommended restrictions</b>	None known.
<b>Manufacturer information</b>	Iron Out dba Summit Brands 7201 Engle Road Fort Wayne, IN 46804-5875 US Phone: 260-483-2519 Emergency Phone: 1-800-424-9300 (CHEMTREC)

## 2. Hazards Identification

<b>Physical hazards</b>	Corrosive to metals	Category 1
<b>Health hazards</b>	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
<b>Environmental hazards</b>	Not classified.	
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		



<b>Signal word</b>	Warning
<b>Hazard statement</b>	May be corrosive to metals. Causes skin irritation. Causes serious eye irritation.

**Precautionary statement**

<b>Prevention</b>	Keep only in original container. Wash thoroughly after handling. Wear protective gloves. Wear eye/face protection.
<b>Response</b>	Absorb spillage to prevent material damage. 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. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Specific treatment (see this label). Take off contaminated clothing and wash it before reuse.
<b>Storage</b>	Store in corrosive resistant container with a resistant inner liner.
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.

**Hazard(s) not otherwise classified (HNOC)** None known.

**Supplemental information** Not applicable.

## 3. Composition/Information on Ingredients

**Mixture**

Chemical name	Common name and synonyms	CAS number	%
Citric Acid		77-92-9	15 - 40

**Composition comments** US GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

## 4. First Aid Measures

<b>Inhalation</b>	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
<b>Skin contact</b>	If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Specific treatment (see product label).
<b>Eye contact</b>	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.

<b>Ingestion</b>	Rinse mouth. Do not induce vomiting. Get medical attention if symptoms occur. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.
<b>Most important symptoms/effects, acute and delayed</b>	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

## 5. Fire Fighting Measures

<b>Suitable extinguishing media</b>	Foam. Dry chemical. Carbon dioxide.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Firefighters should wear a self-contained breathing apparatus.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Fire-fighting equipment/instructions</b>	Cool containers with flooding quantities of water until well after fire is out.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Hazardous combustion products</b>	May include and are not limited to: Oxides of carbon.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	Not available.
<b>Sensitivity to static discharge</b>	Not available.

## 6. Accidental Release Measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep out of low areas. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Large Spills: Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth and place into containers. Use water spray to reduce vapors or divert vapor cloud drift. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use.
<b>Environmental precautions</b>	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground. Do not discharge into lakes, streams, ponds or public waters.

## 7. Handling and Storage

<b>Precautions for safe handling</b>	Avoid prolonged exposure. Avoid contact with clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. Avoid contact with eyes and skin.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in corrosive resistant container with a resistant inner liner. Store in a closed container away from incompatible materials. Keep only in the original container. Store in a cool, dry place out of direct sunlight. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children.

## 8. Exposure Controls/Personal Protection

<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).

<b>Appropriate engineering controls</b>	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Use only under good ventilation conditions or with respiratory protection.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Safety goggles or glasses.
<b>Skin protection</b>	
<b>Hand protection</b>	Rubber gloves. Confirm with a reputable supplier first.
<b>Other</b>	Wear appropriate chemical resistant clothing. As required by employer code.
<b>Respiratory protection</b>	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
<b>Thermal hazards</b>	Not applicable.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

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## 9. Physical and Chemical Properties

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<b>Appearance</b>	Clear
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid
<b>Color</b>	Colorless
<b>Odor</b>	Citrus
<b>Odor threshold</b>	Not available.
<b>pH</b>	1.2 - 1.5
<b>Melting point/freezing point</b>	120 - 127 °F (48.89 - 52.78 °C) (wax plug)
<b>Initial boiling point and boiling range</b>	Not available.
<b>Pour point</b>	Not available.
<b>Specific gravity</b>	1.109 - 1.121 g/ml
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Flash point</b>	None
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	2.117 centipoises

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## 10. Stability and Reactivity

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<b>Reactivity</b>	Reacts vigorously with alkaline material. This product may react with strong reducing agents.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Reacts violently with strong alkaline substances. This product may react with reducing agents. Do not mix with other chemicals.

<b>Incompatible materials</b>	This product may react with reducing agents. Incompatible with bases. Caustics. Oxidizers. Reducing agents.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon.

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## 11. Toxicological Information

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**Routes of exposure** Eye, Skin contact, Ingestion.

**Information on likely routes of exposure**

<b>Ingestion</b>	Expected to be a low ingestion hazard.
<b>Inhalation</b>	No adverse effects due to inhalation are expected.
<b>Skin contact</b>	Causes skin irritation. This product is non-corrosive based on test data.
<b>Eye contact</b>	Causes serious eye irritation. This product is non-corrosive based on test data.

**Symptoms related to the physical, chemical and toxicological characteristics** Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

**Information on toxicological effects**

**Acute toxicity**

Product	Species	Test Results
Glister Dishwasher Magic Machine Cleaner (CAS Mixture)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rat	> 2000 mg/kg
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg

Components	Species	Test Results
Citric Acid (CAS 77-92-9)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Not available	
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Mouse	5040 mg/kg
	Rat	3000 mg/kg

**Skin corrosion/irritation** Causes skin irritation.

<b>Exposure minutes</b>	Not available.
<b>Erythema value</b>	Not available.
<b>Oedema value</b>	Not available.

**Serious eye damage/eye irritation** Causes serious eye irritation. This product is non-corrosive based on test data.

<b>Corneal opacity value</b>	Not available.
<b>Iris lesion value</b>	Not available.
<b>Conjunctival reddening value</b>	Not available.
<b>Conjunctival oedema value</b>	Not available.
<b>Recover days</b>	Not available.

**Respiratory or skin sensitization**

<b>Respiratory sensitization</b>	Not available.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.

**Germ cell mutagenicity** Non-hazardous by WHMIS/OSHA criteria.

**Mutagenicity** Non-hazardous by WHMIS/OSHA criteria.

**Carcinogenicity** Not classified or listed by IARC, NTP, OSHA and ACGIH.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**  
Not listed.

**Reproductive toxicity** Non-hazardous by WHMIS/OSHA criteria.

<b>Teratogenicity</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not available.
<b>Chronic effects</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Further information</b>	Not available.
<b>Name of Toxicologically Synergistic Products</b>	Not available.

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## 12. Ecological Information

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<b>Ecotoxicity</b>	Not available.
<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Mobility in general</b>	Not available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

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## 13. Disposal Considerations

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<b>Disposal instructions</b>	Review federal, state/provincial, and local government requirements prior to disposal. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

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## 14. Transport Information

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<b>General</b>	Canada: TDG Proof of Classification: In accordance with Part 2.2.1 (SOR/2014-152) of the Transportation of Dangerous Goods Regulations, we certify that the classification of this product is correct as of the SDS date of issue. If applicable, the technical name and the classification of the product will appear below.
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### U.S. Department of Transportation (DOT)

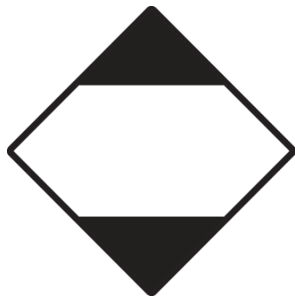
#### Basic shipping requirements:

<b>UN number</b>	UN3265
<b>Proper shipping name</b>	Corrosive liquid, acidic, organic, n.o.s.
<b>Technical name</b>	Citric Acid
<b>Hazard class</b>	Limited Quantity - US
<b>Packing group</b>	III
<b>Special provisions</b>	IB3, T7, TP1, TP28

### Transportation of Dangerous Goods (TDG - Canada)

#### Basic shipping requirements:

<b>UN number</b>	UN3265
<b>Proper shipping name</b>	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
<b>Technical name</b>	Citric Acid
<b>Hazard class</b>	Limited Quantity - Canada
<b>Packing group</b>	III
<b>Special provisions</b>	16




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## 15. Regulatory Information

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**Canadian federal regulations** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

**Canada WHMIS Ingredient Disclosure: Listed substance**

Citric Acid (CAS 77-92-9) Listed.

**Export Control List (CEPA 1999, Schedule 3)**

Not listed.

**Greenhouse Gases**

Not listed.

**Precursor Control Regulations**

Not regulated.

**WHMIS classification** Exempt - Registered product - (DIN 02415569)

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

EPA Reg. # 9902-2

CAUTION: KEEP OUT OF THE REACH OF CHILDREN.

PRECAUTIONARY STATEMENTS: Hazardous to humans and domestic animals.  
 CAUTION: Harmful if absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes and clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. DO NOT mix with chlorine bleach or any other product as harmful fumes may result.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
 Delayed Hazard - No  
 Fire Hazard - No  
 Pressure Hazard - No  
 Reactivity Hazard - No

**SARA 302 Extremely hazardous substance** No

**SARA 311/312 Hazardous chemical** No

**SARA 313 (TRI reporting)**  
 Not regulated.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**US state regulations** California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**US - Texas Effects Screening Levels: Listed substance**

Citric Acid (CAS 77-92-9) Listed.

**US. Massachusetts RTK - Substance List**

Not regulated.

**US. Pennsylvania RTK - Hazardous Substances**

Not regulated.

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

Not Listed.

**Inventory status**

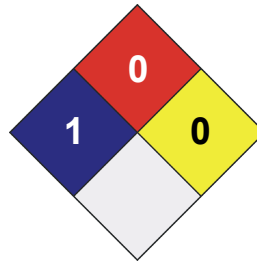
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

**16. Other Information**

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

<b>HEALTH</b>	/ 1
<b>FLAMMABILITY</b>	0
<b>PHYSICAL HAZARD</b>	0
<b>PERSONAL PROTECTION</b>	X



**Disclaimer**

The data contained in this material safety data sheet was obtained from sources that were technically accurate, reliable, and state of the art when this document was prepared. If data was unavailable to complete certain sections, the absence of that data is identified in this document. Because the supplier cannot know the exact circumstances during actual use of this product, other hazards, exposure scenarios, disposal considerations, and regulations may apply and it is the responsibility of the user to read and understand the product label and this document before use. Do not use the product for purposes other than those stated in Section 1.

**Issue date**

06-September-2016

**Effective date**

27-April-2015

**Expiry date**

27-April-2018

**Further information**

For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.

**Prepared by**

Dell Tech Laboratories, Ltd. Phone: (519) 858-5021

**Other information**

Redbook revision # 14, 11/5/14