

# MATERIAL SAFETY DATA SHEET

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## Section I – Product & Company Identification

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Product Name: **ZAGERS Z-101 RUST WORKS**  
Effective Date: 08/29/12  
Company Information: Zagers Brand, Inc.  
1312 Washington Street  
Orlando, FL 32805  
Company Phone: 407-849-6163  
**Emergency Phone: Info Trac 1-800-535-5053**

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## Section II – Hazardous Ingredients

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Component	CAS #	TLV (ppm)	% (in prod.)
Oxalic acid	144-62-7	1	<2
Sulfamic acid	5329-14-6	NA	<3

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## Section III – Health Hazard

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Acute Effects of Overexposure:

Skin: Irritant. May cause irritation and redness. Harmful if absorbed through skin.

Eyes: Irritant. Inflammation is characterized by redness, watering and itching.

Inhale: may cause respiratory irritation of the respiratory tract, protein in the urine, nosebleed, headache, coughing and vomiting.

Ingest: Products containing oxalic acid are toxic because of the acidic and chelating properties. It is especially toxic when ingested because it can combine with calcium to form calcium oxalate which might precipitate in the kidney tubules and in the brain.

Existing skin diseases may be aggravated by overexposure.

Chronic Effects of Overexposure: Repeated or prolonged exposure may produce defatting of the skin

HMS Codes: Health 3; Flam. 0; React.0; Pers. Protection D

Carcinogenic effects: None of the ingredients are listed as carcinogens by IARC, NTP, or OSHA

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## Section IV – First Aid Measures

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First aid procedures:

Skin: Wash contaminated area with soap or mild detergent. Get medical attention. Wash clothing before reuse.

Eyes: Check for and remove contact lens. Immediately flush with plenty of water for at least 15 minutes. If irritation develops consult a physician.

Inhale: If inhaled remove to fresh air. If not breathing give artificial respiration.

Ingest: If product is swallowed, do not induce vomiting. If vomiting occurs keep head lower than hips to help prevent aspiration. If individual is alert, give plenty of water to drink. Never give anything by mouth to an unconscious person.

Notes to Physician: Treat symptomatically and supportively.

Antidote: Intravenous administration of calcium gluconate or calcium chloride may be required if hypocalcaemia or hypocalcaemia tetany occur.

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## Section V – Fire And Explosion Data

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Flash Point (F) None

Flammable Limits: LEL: NA UEL NA

Fire Fighting Procedure: use water vapor, foam or fog. Firefighters should wear proper protective equipment.

Fire Hazard: NA

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## Section VI – Accidental Release Measures

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Spill Clean Up: Wear appropriate protective equipment. Absorb with an inert material and put spilled material in appropriate waste disposal.

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## Section VII – Handling And Storage Procedures

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Handling: Avoid contact with eyes. Keep container closed. Wash thoroughly after handling.

Storage: Keep container in cool well ventilated area. Keep container tightly closed. Store away from incompatible materials. Keep out of the reach of children.

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**Section VIII – Exposure Controls, Personal Protection**

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Eye Protection: No special protection is required.  
Protective Clothing: No special protection is required.  
Respiratory: No special protection is required.

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**Section IX – Physical And Chemical Data**

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Boiling Point (F)	212
Specific Gravity:	1.01 – 1.02
pH:	<1.0
VOC content (%)	<1
Evaporation Rate (Bu acetate=1)	NA
Vap. Pressure (mm Hg)	NA
Vap. Density	NA
Solubility in Water:	soluble
Appearance and Odor:	clear thin liquid with faint apple fragrance

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**Section X – Reactivity Data**

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Stability: Stable  
Incompatibility: ammonia, alkaline materials  
Polymerization: Will not occur  
Hazardous Decomposition: carbon monoxide, carbon dioxide and other organic materials.

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**Section XI – Toxicological Information**

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Toxicity to animals  
2-butoxy ethanol  
Oral (LD50) acute: 1746 mg/kg Rat (375 mg/kg for oxalic acid, 3160 for sulfamic acid)  
Dermal (LD50) acute: 680 mg/kg Rabbit  
Vapor (LC50) acute 450 ppm 4 hours Rat female

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**Section XII – Ecological Information**

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Ecological Information - not available  
Biodegradable/OECD – not available

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**Section XIII – Disposal Considerations**

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Waste Disposal Method: Liquid wastes are not permitted in landfill. Consult local, state, and federal agencies for proper disposal in your area.  
Classification: hazardous waste, (RCRA waste)

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**Section XIV – Transport Information**

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Proper shipping name Corrosive liquid, acidic, organic, n.o.s. (Sulfamic acid and oxalic acid)  
DOT classification DOT Class 8: Corrosive liquid  
UN number 3265

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**Section XV – Regulatory Information**

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SARA 313 toxic chemical notification and release reporting - No products found  
Clean Water Act (CWA) regulated substance – no product found  
Clean Air Act (CAA) 112 regulated toxic substances - no product found

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**Section XVI – Other Information**

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To the best of our knowledge information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.  
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.