



# Material Safety Data Sheet

Issuing date 29-Sep-2011

Revision Date 03-Jan-2012

Version 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name** Swisher Reclaim Part B

**Product code** 40298

**Reference number(s)** 42153

**UN/ID No** UN3261

**Recommended Use** Powdered Laundry Sour

**Distributor**

Swisher Hygiene Inc.  
4725 Piedmont Row Drive,  
Suite 400,  
Charlotte, NC 28210

**Chemical Emergency Phone Number** 800-424-9300 (Chemtrec)

**Company Emergency Phone Number** 800-444-4138

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

This product contains substances which at their given concentration, are considered to be hazardous to health.

**Appearance** powder

**Physical state** powder.

**Odor** Mild

**Potential Health Effects**

**Acute toxicity**

<b>Eyes</b>	Severe Burns.
<b>Skin</b>	Severe burns.
<b>Inhalation</b>	Causes severe burns
<b>Ingestion</b>	Harmful or fatal if swallowed

**Chronic Effects** No known effect based on information supplied

**Aggravated Medical Conditions** None known.

**Environmental hazard** See Section 12 for additional Ecological Information

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical Name	CAS-No	Weight %
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Oxalic acid	144-62-7	0
Citric acid	77-92-9	0

#### 4. FIRST AID MEASURES

<b>Eye contact</b>	Flush with flowing water for 15 minutes & see physician.
<b>Skin contact</b>	Flush with flowing water for 15 minutes. See physician if irritation persists.
<b>Inhalation</b>	Move to fresh air
<b>Ingestion</b>	Give milk or water to dilute material; DO NOT induce vomiting. Avoid alcohol. CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY; NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.
<b>Notes to physician</b>	Treat symptomatically

#### 5. FIRE-FIGHTING MEASURES

Flammable Properties	FLAMMABLE			
Flash point	N/A			
Suitable Extinguishing Media	Water spray, dry chemical, carbon dioxide, alcohol foam, if product is involved. Water or foam may cause frothing.			
Hazardous Combustion Products	Carbon Monoxide, Formic Acid, Ammonia, Chlorine, Hydrogen Chloride.			
Explosion Data				
Sensitivity to Mechanical Impact	none			
Sensitivity to Static Discharge	none			
Specific hazards arising from the chemical	Product is a combustible solid below 215°F. Partial decomposition occurs at 300°F. Decomposition include Carbon Monoxide & Formic Acid which are toxic & flammable. Can react violently with strong oxidizers.			
Protective Equipment and Precautions for Firefighters	Avoid exposure to fumes or vapors. Wear self-contained positive pressurized breathing apparatus MSHA/NIOSH approved or equivalent to maintain TLV.			
NFPA	Health Hazard 0	Flammability 0	Stability 0	Physical and chemical hazards -
HMIS	Health Hazard 3	Flammability 1	Physical Hazard 0	Personal protection E

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Ensure adequate ventilation
<b>Environmental precautions</b>	Try to prevent the material from entering drains or water courses
<b>Methods for Containment</b>	Isolate from sources of ignition Neutralize with sodium bicarbonate or sodium carbonate. Neutralized solution is also toxic and should be handled accordingly
<b>Methods for cleaning up</b>	Sweep up immediately with minimum dusting. Collect in dry containers, label "POISON" & store in a cool dry place of low risk, away from food, food chemical or strong oxidizers. Release of solutions may be subject to local regulations.

#### 7. HANDLING AND STORAGE

**Advice on safe handling**

KEEP OUT OF REACH OF CHILDREN DANGER POISON Contains oxalic acid. May be fatal if swallowed Do not contaminate water, food, or feed Do not get in eyes, on skin or on clothing Remove and wash contaminated clothing before re-use Avoid entry into sewers or natural waters

**Technical measures/Storage conditions**

Store upright in original container. Avoid all contact Do not use or store near heat, sparks or open flames

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines**

Review Section 3 & 4 for Exposure Guidelines.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Oxalic acid 144-62-7	STEL: 2 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	IDLH: 500 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> STEL: 2 mg/m <sup>3</sup>

**Engineering Measures**

Showers  
Eyewash stations  
Ventilation systems

**Personal Protective Equipment Institutional Environment****Eye/Face Protection**

Safety glasses are suggested when using this product in heavy use and institutional environments.

**Consumer Environments**

Care should be taken to avoid Eye contact.

**Skin and body protection**

Rubber gloves

**Respiratory protection**

Unnecessary in open institutional environment.

**Hygiene measures**

Practice good personal hygiene. Wash after handling.

**Personal Protective Equipment Industrial Environment****Eye/Face Protection**

Splash-proof chemical goggles or face shield.

**Skin and body protection**

Impervious rubber, alkali-proof protective gloves Impervious rubber boots & apron.

**Respiratory protection**

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene measures**

Practice good personal hygiene. Wash after handling. Shower at end of work period  
Practice good personal hygiene. Wash after handling

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**9.1 Information on basic physical and chemical properties**

<b>Physical state</b>	powder	<b>Odor</b>	Mild
<b>Appearance</b>	powder	<b>Odor Threshold</b>	No information available
<b>Color</b>	white		
<b>Property</b>	<b>Values</b>	<b>Remarks</b>	<b>Methods</b>
pH	1.0	No information available	
Melting/freezing point		No information available	
Freezing Point		No information available	
Boiling point/boiling range	NA	No information available	
Flash Point		No information available	
Evaporation rate		No information available	
Flammability (solid, gas)		No information available	
Flammability Limits in Air		No information available	
upper flammability limit			

<b>lower flammability limit</b>		
<b>Explosion Limits</b>		
<b>upper</b>		
<b>lower</b>		
<b>Vapor pressure</b>	NA	No information available
<b>Vapor density</b>	NA	No information available
<b>Specific Gravity</b>	1.653	No information available
<b>Water solubility</b>	13.7% solution at 77°F	No information available
<b>Solubility in other solvents</b>		No information available
<b>Partition coefficient: n-octanol/water</b>		No information available
<b>Autoignition temperature</b>		No information available
<b>Decomposition temperature</b>		No information available
<b>Viscosity, kinematic</b>		No information available
<b>Viscosity, dynamic</b>		No information available
<b>Explosive properties</b>	No information available	
<b>Oxidizing Properties</b>	No information available	

**9.2 Other information**

<b>Softening point</b>	No information available
<b>Molecular Weight</b>	No information available
<b>VOC Content(%)</b>	No information available
<b>Density VALUE</b>	No information available
<b>Bulk Density VALUE</b>	No information available

**10. STABILITY AND REACTIVITY**

<b>Stability</b>	Stable
<b>Incompatible products</b>	Strong oxidizing agents, alkalies, chlorine bleach.
<b>Conditions to Avoid</b>	Reacts with alkalies, decomposes above 300°F yielding toxic, flammable & corrosive gases. Reacts with some silver compounds forming explosive silver oxalate. Reacts with oxidizers such as chlorites & hypochlorites & oleum, possibly with violence.
<b>Hazardous Decomposition Products</b>	Carbon Monoxide, Formic Acid, Ammonia, Chlorine, Hydrogen Chloride.
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur

**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

<b>Product Information</b>	Product does not present an acute toxicity hazard based on known or supplied information.
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Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Oxalic acid	7500 mg/kg ( Rat )	20000 mg/kg ( Rat )	
Citric acid	3000 mg/kg ( Rat )		

**Chronic toxicity**

<b>Target Organ Effects</b>	None known.
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**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

The environmental impact of this product has not been fully investigated

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Oxalic acid		4000: 24 h Lepomis macrochirus mg/L LC50 static		125 - 150: 48 h Daphnia magna mg/L EC50 Static
Citric acid		1516: 96 h Lepomis macrochirus mg/L LC50 static		

Chemical Name	log Pow
Oxalic acid	0

### 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods** Dispose of in accordance with applicable Federal, State & Local regulations. Aqueous solutions are an EPA RCRA corrosive waste, having a hazardous waste ID#D002 (40 CFR 261.22). Solid acid is not hazardous waste.

**Contaminated packaging** Do not re-use empty containers

**US EPA Waste Number** D002

Chemical Name	California Hazardous Waste Status
Oxalic acid	Toxic

### 14. TRANSPORT INFORMATION

**Note** UN3261, Corrosive Solid, Acidic, Organic, n.o.s. (Contains Oxalic Acid), 8, PG III

**DOT** Regulated  
**Proper shipping name** UN3261, Corrosive Solid, Acidic, Organic, n.o.s. (Contains Oxalic Acid), 8, PG III  
**Hazard class** 8  
**UN/ID No** UN3261  
**Packing Group** III

**TDG** Not regulated

**MEX** Not regulated

**ICAO** Not regulated

**ICAO/IATA** Not regulated

**IMDG / IMO** Not regulated

**RID** Not regulated

**ADR/RID** Not regulated

**ADN** Not regulated

### 15. REGULATORY INFORMATION

**International Inventories**

<b>TSCA</b>	TSCA
<b>DSL</b>	Complies
<b>NDSL</b>	Complies
<b>EINECS</b>	Complies
<b>ELINCS</b>	-
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**U.S. Federal Regulations****SARA 313**

Sara Title III (EPCRA) NOTIFICATION: Does not contain chemicals subject of the reporting requirements of Section 302, 304, or 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986.

COMPREHENSIVE ENVIRONMENT RESPONSE, COMPENSATION, AND LIABILITY ACT(CERLA) NOTIFICATION: This does not contain chemical subject to reporting under CERCLA For more information consult 40 CFR parts 302, 355, 370, 372, and 40 CFR part 68.

**SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	no
<b>Chronic Health Hazard</b>	no
<b>Fire Hazard</b>	no
<b>Sudden Release of Pressure Hazard</b>	no
<b>Reactive Hazard</b>	no

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**U.S. State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations****International Regulations**

Chemical Name	Carcinogen Status	Exposure Limits
Oxalic acid		Mexico: TWA 1 mg/m <sup>3</sup> Mexico: STEL 2 mg/m <sup>3</sup>

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**16. OTHER INFORMATION**

**Prepared By** Swisher Hygiene Inc.  
4725 Piedmont Row Drive  
Suite 400  
Charlotte, NC 28210

**Issuing date** 29-Sep-2011

**Revision Date** 03-Jan-2012

**Revision Note** No information available

**Disclaimer**

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

**End of Material Safety Data Sheet**