

Econosan

Preparation Date: 15-Nov-2007

Revision Date: 16-Feb-2015

SAFETY DATA SHEET

Revision Number: 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**Product Identifier****Product Name** Econosan**Other means of identification****Item#:** 4959-41**UN-No** 3264**Synonyms** None**Recommended use of the chemical and restrictions on use****Recommended use** Food contact no rinse sanitizer. Restricted to professional users.**Uses advised against** No information available**Details of the supplier of the safety data sheet****Supplier** DeLaval Manufacturing
11100 N. Congress Ave.
Kansas City, MO 64153

Tel: 816-891-7700, 8am – 5pm M-F

Emergency Telephone Number

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION**Classification****OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation	Category 1
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3

Sulfuric acid and other mineral acids mist statement

The International Agency for Research on Cancer (IARC) has classified "strong inorganic acid mists containing sulfuric acid" as a known human carcinogen, (IARC category 1). This classification applies only to mists containing sulfuric acid and not to sulfuric acid or sulfuric acid solutions.

Corrosive to metals	Category 1
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Label Elements**Emergency Overview****DANGER****Hazard Statements**

Causes severe skin burns and eye damage

May cause cancer

May cause respiratory irritation. May cause drowsiness or dizziness

May be corrosive to metals

**Appearance** Clear Colorless**Physical state** Liquid**Odor** Pungent**Precautionary Statements - Prevention**

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a POISON CENTER or doctor/physician
Call a POISON CENTER or doctor/physician if you feel unwell
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other Information**

- May be harmful in contact with skin
- Harmful to aquatic life with long lasting effects
- Harmful to aquatic life

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade Secret
Propionic acid	79-09-4	10 - 20%	*
Capric acid / Decanoic acid	334-48-5	0 - 10%	*
Pelargonic acid / Nonanoic acid	112-05-0	0 - 10%	*
Phosphoric acid	7664-38-2	0 - 10%	*
Sulfuric acid	7664-93-9	0 - 10%	*

* The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES**FIRST AID MEASURES**

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and

	continue flushing for at least 15 minutes. Call a physician immediately.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Call a physician immediately.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Ingestion	Do not induce vomiting. Drink 1 or 2 glasses of water. Call a physician or Poison Control Centre immediately. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects	According to our experience and to the information provided to us, the product does not have any harmful effects if it is used and handled as specified.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray. Dry chemical. alcohol-resistant foam. Carbon dioxide (CO₂).

Unsuitable Extinguishing Media Decomposition by contact with water may generate vapours which can be ignited by heat or open flame.

Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes.

Explosion Data**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes and clothing. Use personal protective equipment.

Environmental Precautions

Environmental Precautions Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

Methods for cleaning up Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials bases. organic materials. light metals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Keep out of the reach of children This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Propionic acid 79-09-4	TWA: 10 ppm	TWA: 10 ppm TWA: 30 mg/m ³	
Phosphoric acid 7664-38-2	TWA: 1 mg/m ³ STEL: 3 mg/m ³	TWA: 1 mg/m ³ STEL: 3 mg/m ³	1000 mg/m ³
Sulfuric acid 7664-93-9	TWA: 0.2 mg/m ³	TWA: 1 mg/m ³	15 mg/m ³

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face Protection	Goggles.
Skin and body protection	No special technical protective measures are necessary.
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.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Pungent
Appearance	Clear Colorless	Odor Threshold	No information available
Color	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks/ • Method</u>
pH	2	
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
Flash Point	No information available	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit	No information available	
Lower flammability limit	No information available	
Vapor Pressure	No information available	
Vapor Density	No information available	
Specific Gravity	1.16	
Water Solubility	soluble	
Solubility in other solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition Temperature	No information available	
Decomposition temperature	No information available	
Viscosity of Product	No information available	
Dynamic viscosity	No information available	
Explosive Properties	No information available	
Oxidizing Properties	No information available	

Other information

Softening Point	No information available
Molecular Weight	No information available
VOC Content	No information available
Density	No information available
Bulk Density	No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical Stability

Stable under normal conditions.

Possibility of hazardous reactions

Gives off hydrogen by reaction with some metals (e.g. aluminum).

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

bases. organic materials. light metals.

Hazardous decomposition products

None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	No data available
Inhalation	No data available.
Eye contact	No data available.
Skin contact	No data available.
Ingestion	No data available.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Propionic acid 79-09-4	= 2600 mg/kg (Rat)	= 496 mg/kg (Rabbit)	= 4650 ppm (Rat) 8 h
Capric acid / Decanoic acid 334-48-5	= 3320 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Pelargonic acid / Nonanoic acid 112-05-0	= 5000 mg/kg (Rat)	= 2000 mg/kg (Rat)	-
Phosphoric acid 7664-38-2	= 1530 mg/kg (Rat)	2730 mg/kg (Rabbit)	850 mg/m ³ (Rat) 1 h
Sulfuric acid 7664-93-9	= 2140 mg/kg (Rat)	-	= 510 mg/m ³ (Rat) 2 h

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic effects No information available.

Carcinogenicity

Chemical Name	ACGIH	IARC	NTP	OSHA
Sulfuric acid 7664-93-9	A2	Group 1	Known	X

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Sulfuric acid and other mineral acids mist statement The International Agency for Research on Cancer (IARC) has classified "strong inorganic acid mists containing sulfuric acid" as a known human carcinogen, (IARC category 1). This classification applies only to mists containing sulfuric acid and not to sulfuric acid or sulfuric acid solutions.

Reproductive Effects No information available.
STOT - single exposure No information available.
STOT-repeated exposure No information available.
Aspiration Hazard No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity
 The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION

Ecotoxicity

10.8% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Microtox	Waterflea
Propionic acid 79-09-4	45.8: 72 h Desmodesmus subspicatus mg/L EC50 43: 96 h Desmodesmus subspicatus mg/L EC50	1: 96 h Pimephales promelas mg/L LC50 static 73 - 99.7: 96 h Lepomis macrochirus mg/L LC50 static 51: 96 h Oncorhynchus mykiss mg/L LC50 static	EC50 = 59.6 mg/L 17 h	-
Capric acid / Decanoic acid 334-48-5	-	54: 96 h Oryzias latipes mg/L LC50 semi-static	EC50 = 11.2 mg/L 5 min EC50 = 9.0 mg/L 25 min EC50 = 9.31 mg/L 15 min	65: 24 h Daphnia magna mg/L EC50
Pelargonic acid / Nonanoic acid 112-05-0	-	93.4 - 115: 96 h Pimephales promelas mg/L LC50 flow-through 68 - 121: 96 h Oncorhynchus mykiss mg/L LC50 static 105: 96 h Lepomis macrochirus mg/L LC50 static	-	-
Phosphoric acid 7664-38-2	-	3 - 3.5: 96 h Gambusia affinis mg/L LC50	-	4.6: 12 h Daphnia magna mg/L EC50
Sulfuric acid 7664-93-9	-	LC50 42 mg/l 96 h	-	EC50 42.5 mg/L 48 h

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical Name	Partition coefficient
Propionic acid 79-09-4	0.25 - 0.33
Capric acid / Decanoic acid 334-48-5	4.09

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method

Dispose of in accordance with local regulations. Should not be released into the environment.

Contaminated Packaging

Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION

DOT

UN-No	3264
Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s (Sulfuric acid, Propionic acid Solution)
Hazard Class	8
Packing Group	II

15. REGULATORY INFORMATION

International Inventories

TSCA	TSCA
DSL/NDSL	DSL/NDSL
EINECS/ELINCS	Complies
ENCS	Does not Comply
CHINA	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
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

Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous**Categorization**

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

CWA (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)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Propionic acid 79-09-4	5000 lb	-	-	X

Phosphoric acid 7664-38-2	5000 lb	-	-	X
Sulfuric acid 7664-93-9	1000 lb	-	-	X

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

Chemical Name	RQ	CERCLA EHS RQs	RQ
Propionic acid 79-09-4	5000	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Phosphoric acid 7664-38-2	5000	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Sulfuric acid 7664-93-9	1000	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ

State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

State Right-to-Know**U.S. EPA Label information**

EPA Pesticide registration number Not applicable

16. OTHER INFORMATION

NFPA	Health 3	Flammability 1	Instability 0	Physical Hazard -
HMIS	Health 0	Flammability 0	Physical hazards 0	Personal Protection X

Prepared By DeLaval Manufacturing
11100 N. Congress Ave.
Kansas City, MO 64153 USA
1-816-891-7700

Preparation Date: 15-Nov-2007
Revision Date: 16-Feb-2015

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 SDS