MS/DS Concentrate

Preparation Date: 21-Dec-2007

Revision Date: 18-Feb-2015

Revision Number: 1

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

<u>Product Identifier</u> Product Name	MS/DS Concentrate
Other means of identification	
Item#:	9558
UN-No	1760
Synonyms	None
<u>Recommended use of the chemica</u> Recommended use Uses advised against	l and restrictions on use Restricted to professional users. No information available
Details of the supplier of the safety	data sheet
Supplier	DeLaval Manufacturing 11100 N. Congress Ave. Kansas City, MO 64153

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)

Tel: 816-891-7700, 8am - 5pm M-F

Skin Corrosion/Irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3
Corrosive to metals	Category 1

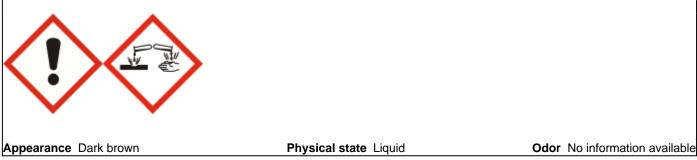
Label Elements

Emergency Overview

DANGER

Hazard Statements

Causes severe skin burns and eye damage May cause respiratory irritation. May cause drowsiness or dizziness May be corrosive to metals



Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection 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

 Toxic to aquatic life Unknown Acute Toxicity

0.7% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade Secret
Hydriodic acid	10034-85-2	0 - 10%	*
lodine	7553-56-2	10 - 20%	*

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

4. FIRST AID MEASURES

FIRST AID MEASURES

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and Eye contact 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 According to our experience and to the information provided to us, the product does not Effects have any harmful effects if it is used and handled as specified.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide (CO2). Dry chemical.

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

Thermal decomposition can lead to release of irritating gases and vapours.

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.

Personal precautions	, protective eq	uipment and emer	gency procedures

Personal precautions Ensure adequate ventilation. 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. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

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. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

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

Incompatible Materials bases. bleach. 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
lodine	TWA: 0.01 ppm	Ceiling: 0.1 ppm	2 ppm
7553-56-2	STEL: 0.1 ppm	Ceiling: 1 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 Appearance Color	Liquid Dark brown No information available	Odor Odor Threshold	No information available No information available
Property	Values	Remarks/ • Method	
рН	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	1.23		
Water Solubility	soluble		
Solubility in other solvents	No information available		
Partition coefficient: n-octanol/wate			
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 Molecular Weight VOC Content Density Bulk Density	No information available No information available No information available 10.2 lb/gal No information available		

10. STABILITY AND REACTIVITY

Reactivity No data available

<u>Chemical Stability</u> Stable under normal conditions. <u>Possibility of hazardous reactions</u> None under normal processing. <u>Conditions to Avoid</u> Extremes of temperature and direct sunlight. <u>Incompatible Materials</u> bases. bleach. metals. <u>Hazardous decomposition products</u> Thermal decomposition can lead to release of irritating gases and vapours.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

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

Component information	Component mormation		
Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
lodine 7553-56-2	14000 mg/Kg	-	137 ppm

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	No information available.
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	0.7% of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated	based on chapter 3.1 of the GHS document .
LD50 Oral:	3570 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

73.8% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Microtox	Waterflea
lodine	-	LC50 (96 h)	-	LC50 (48 h)
7553-56-2		0.53 mg/L		0.16 mg/L

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

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

01	
UN-No	1760
Proper Shipping Name	Corrosive liquid, n.o.s (contains lodine)
Hazard Class	8
Packing Group	II

15. REGULATORY INFORMATION

International Inventories	
TSCA	TSCA
DSL/NDSL	DSL/NDSL
EINECS/ELINCS	Does not Comply
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
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)

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

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

<u>NFPA</u> HMIS	Health 3 Health 0	Flammability 1 Flammability 0	Instability 0 Physical hazards 0	Physical Hazard - Personal Protection >
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Preparation Date:	21-D	ec-2007		
Revision Date:	18-F	eb-2015		
Revision Note				
No information available				
Disclaimer				
	ed on this MSDS is	s correct to the best of our	knowledge, information and	d belief at the date of its
			afe handling, use, processi	

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End of SDS