

36274

CUSTOMER: 327598
BATCH #: 1781306
PICK ZONE: RW02
PRODUCT NAME: LECTRASOLV AEROSOL, MM

ORDER #: 2208368
DELIVERY ID: 13335490
PICK SEQUENCE #: 5050
BARCODE #: 12039409

Safety Data Sheet: LECTRASOLV AEROSOL, MM

Supersedes Date 02/18/2013

Issuing Date 07/17/2013

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name LECTRASOLV AEROSOL, MM
Recommended use Solvent mixture
Information on Manufacturer
CERTIFIED LABS, DIV. OF NCH CORP.
BOX 152170
IRVING, TEXAS 75015

Product Code 12039409
Chemical nature Halogenated hydrocarbon
Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Colorless

Physical State Liquid

Odor Ether-like

GHS

Classification

Physical Hazards

Gases under pressure

Compressed Gas

Health Hazard

Aspiration Toxicity

Acute Inhalation Toxicity - Gas

Skin Corrosion/Irritation

Serious Eye Damage/Eye Irritation

Carcinogenicity

Specific target organ systemic toxicity (single exposure)

Specific target organ systemic toxicity (repeated exposure)

Other hazards

None

Category 1

Category 4

Category 2

Category 2A

Category 1B

Category 3

Category 1

Labeling

Signal Word

DANGER



Hazard Statements

H332 - Harmful if inhaled

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H305 - May be harmful if swallowed and enters airways

H336 - May cause drowsiness or dizziness

H370 - Causes damage to liver, lungs, kidneys, heart, blood,

cardiovascular system and nervous system through prolonged or repeated exposure

H350 - May cause cancer

H280 - Contains gas under pressure; may explode if heated

Precautionary Statements

P202 - Do not handle until all safety precautions have been read and understood

P280 - Wear protective gloves, protective clothing and eye protection.

P210 - Keep away from heat, sparks, open flames or hot surfaces.

P251 - Pressurized container: Do not pierce or burn, even after use

P270 - Do not eat, drink or smoke when using this product

P260 - Do not breathe mist or vapor

P271 - Use in a well-ventilated area.

P264 - Wash face, hands and any exposed skin thoroughly after handling.

P304 + P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.

P312 - Call a physician if unwell.

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P332 + P313 - If skin irritation occurs, get medical attention.

P362 - Take off contaminated clothing and wash before reuse

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists, get medical attention.

P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a physician if unwell.

P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

P403 - Store in a well-ventilated place
 P501 - Dispose of contents and container in accordance with applicable regulations.

4 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Tetrachloroethylene	127-18-4	30-60
Methylene chloride	75-09-2	15-40
Carbon dioxide	124-38-9	1-5
Propylene oxide	75-56-9	0.1-1
Carbon tetrachloride	56-23-5	0.1-1

4. FIRST AID MEASURES

General advice	Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists.
Eye Contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention immediately.
Skin Contact	Remove immediately all contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately.
Inhalation	Move to fresh air. In case of shortness of breath, give oxygen. If breathing has stopped, apply artificial respiration. Get medical attention immediately.
Ingestion	Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person. Rinse mouth.
Notes to physician	Aspiration hazard if swallowed - can enter lungs and cause damage. May be fatal if swallowed and enters airways. May cause cardiac arrhythmia. Acidosis.

5. FIRE-FIGHTING MEASURES

Flash Point	> 201 °F / > 94 °C	Method	Seta closed cup
Flammability Limits in Air %	Solvent mixture.	Upper 23	Lower 13
Suitable Extinguishing Media	Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.		
Specific hazards arising from the chemical	Solvent vapors are heavier than air and may spread along floors. Vapors may ignite and explode. Material can create slippery conditions. Flame extension: 0 inches / 0 cm and Burnback: 0 inch / 0 cm.		
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.		
Aerosol Level (NFPA 30B) -	1		
NFPA	Health 2	Flammability 1	Instability 0
HMS	Health 2	Flammability 1	Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Ensure adequate ventilation. Use personal protective equipment.
Environmental Precautions	Prevent product from contaminating soil or from entering sewage, drainage systems, and bodies of water. Do not flush into surface water or sanitary sewer system.
Methods for Containment	Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
Methods for Cleaning Up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust)
Neutralizing Agent	Not applicable.

7. HANDLING AND STORAGE

Handling	Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists.			
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place.			
Storage Temperature	Minimum	35 °F / 2 °C	Maximum	120 °F / 49 °C
Storage Conditions	Indoor	X	Outdoor	Heated Refrigerated

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Tetrachloroethylene	TWA: 25 ppm STEL: 100 ppm	TWA: 100 ppm Ceiling: 200 ppm	IDLH: 150 ppm
Methylene chloride	TWA: 50 ppm	TWA: 25 ppm STEL: 125 ppm	IDLH: 2300 ppm
Carbon dioxide	TWA: 5000 ppm STEL: 30000 ppm	TWA: 5000 ppm TWA: 9000 mg/m ³	IDLH: 40000 ppm STEL 30000 ppm STEL 54000 mg/m ³ TWA: 5000 ppm TWA: 9000 mg/m ³
Propylene oxide	TWA: 2 ppm	TWA: 100 ppm TWA: 240 mg/m ³	IDLH: 400 ppm
Carbon tetrachloride	TWA: 5 ppm Skin STEL: 10 ppm	TWA: 10 ppm Ceiling: 25 ppm	IDLH: 200 ppm STEL 2 ppm STEL 12.6 mg/m ³

Engineering Measures
Personal Protective Equipment

Use with local exhaust ventilation. Ensure adequate ventilation, especially in confined areas.

Eye/Face Protection
Skin Protection
Respiratory Protection

Tightly fitting safety goggles.
Wear suitable protective clothing, Impervious gloves.
In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General Hygiene Considerations

Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	Viscosity	Non viscous
Color	Colorless	Odor	Ether-like
Odor Threshold	Not applicable	Appearance	Transparent
pH	Not applicable	Specific Gravity	1.55
Bulk Density (lb/cu ft)	5.17	Evaporation Rate	95.2 (Butyl acetate=1)
Percent Volatile (Volume)	100	VOC Content (%)	0
VOC Content (g/L)	0	Vapor Pressure	3931.25 mmHg @ 70°F
Vapor Density	1.6 (Air = 1.0)	Solubility	Negligible
n-Octanol/Water Partition	No data available	Melting Point/Range	No data available
Decomposition Temperature	No data available	Boiling Point/Range	> 154 °F / 68 °C
Flammability (solid, gas)	No data available	Method	Seta closed cup
Flash Point	> 201 °F / > 94 °C		
Autoignition Temperature	No information available.		
Flammability Limits in Air %	Solvent mixture.	Upper 23 Lower 13	

10. STABILITY AND REACTIVITY

Chemical Stability	Stable. Hazardous polymerization does not occur.
Conditions to Avoid	Keep away from open flames, hot surfaces, and sources of ignition
Incompatible Products	Strong oxidizing agents, Strong bases, Powdered metals, Reducing agents, Amines.
Hazardous Decomposition Products	Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas, Chlorine gas.
Possibility of Hazardous Reactions	None under normal processing

11. TOXICOLOGICAL INFORMATION

Product Information

The following values are calculated based on chapter 3.1 of the GHS document (Rev. 3, 2009):

Oral LD50	2,444.03
Dermal LD50	No information available
Inhalation LC50	
Gas	No information available
Mist	194.29
Vapor	6.71

Principle Route of Exposure Skin contact, Eye contact, Inhalation.

Primary Routes of Entry Inhalation, Skin Absorption.

Acute Effects

Eyes	Severe irritation.
Skin	Severe irritation. May be absorbed through the skin in harmful amounts.
Inhalation	Inhalation may cause central nervous system effects. May cause central nervous system depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Irregular cardiac activity. Inhalation of

Ingestion

vapors in high concentration can cause narcotic effects and metabolic acidosis.

May cause central nervous system effects such as headache, dizziness, weakness, staggering gait, nausea, blurred vision, excitation, and in extreme cases, coma or death. Aspiration hazard if swallowed - can enter lungs and cause damage.

Chronic Toxicity

Prolonged or repeated inhalation may cause damage to the lungs. Prolonged skin contact may defat the skin and produce dermatitis. Liver and kidney injuries may occur. Contains a known or suspected carcinogen.

Target Organ Effects

Respiratory system, Central nervous system, Cardiovascular system, Kidney, Liver, Blood.

Aggravated Medical Conditions

Skin disorders, Respiratory disorders, Central nervous system, Kidney disorders, Liver disorders.

Component Information**Acute Toxicity**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Tetrachloroethylene	= 2629 mg/kg (Rat)	no data available	= 4000 ppm (Rat) 4 h	no data available	no data available
Methylene chloride	> 2000 mg/kg (Rat)	no data available	no data available	no data available	no data available
Carbon dioxide	no data available	no data available	no data available	no data available	no data available
Propylene oxide	= 520 mg/kg (Rat)	no data available	= 4000 ppm (Rat) 4 h	no data available	no data available
Carbon tetrachloride	no data available	no data available	= 8000 ppm (Rat) 4 h	no data available	no data available

Chronic Toxicity

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Tetrachloroethylene	no data available	no data available	no data available	no data available	liver, kidneys, eyes, central nervous system, respiratory system, skin, cardiovascular system
Methylene chloride	no data available	no data available	no data available	no data available	skin, CVS, eyes, CNS (in animals: lung, liver, salivary and mammary gland tumors)
Carbon dioxide	no data available	no data available	no data available	no data available	respiratory system, CVS
Propylene oxide	no data available	skin sensitization	no data available	no data available	eyes, respiratory system, skin (in animals: nasal tumors), CNS, immune system
Carbon tetrachloride	no data available	no data available	no data available	no data available	CNS, eyes, lungs, liver, kidney

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	ACGIH	IARC	NTP	OSHA	Other
Tetrachloroethylene	A3	Group 2A	Reasonably Anticipated	X	not applicable
Methylene chloride	A3	Group 2B	Reasonably Anticipated	X	not applicable
Carbon dioxide	not applicable	not applicable	not applicable	not applicable	not applicable
Propylene oxide	A3	Group 2B	Reasonably Anticipated	X	not applicable
Carbon tetrachloride	A2	Group 2B	Reasonably Anticipated	X	not applicable

12. ECOLOGICAL INFORMATION**Product Information**

No information available.

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Tetrachloroethylene	EC50 > 500 mg/L Pseudokirchneriella subcapitata 96 h	LC50 12.4 - 14.4 mg/L Pimephales promelas 96 h LC50 8.6 - 13.5 mg/L Pimephales promelas 96 h LC50 11.0 - 15.0 mg/L Lepomis macrochirus 96 h LC50 4.73 - 5.27 mg/L Oncorhynchus mykiss 96 h	EC50 = 100 mg/L 24 h EC50 = 112 mg/L 24 h EC50 = 120.0 mg/L 30 min	EC50 6.1 - 9.0 mg/L 48 h	2.53 - 2.88
Methylene chloride	EC50 > 500 mg/L Pseudokirchneriella subcapitata 96 h EC50 > 500 mg/L Pseudokirchneriella subcapitata 72 h	LC50 140.8 - 277.8 mg/L Pimephales promelas 96 h LC50 262 - 855 mg/L Pimephales promelas 96 h LC50 = 193 mg/L Lepomis macrochirus 96 h	EC50 = 1 mg/L 24 h EC50 = 2.88 mg/L 15 min	EC50 1532 - 1847 mg/L 48 h EC50 = 190 mg/L 48 h	1.25
Carbon dioxide	no data available	no data available	no data available	no data available	N/A
Propylene oxide	EC50 = 240 mg/L Pseudokirchneriella subcapitata 96 h	LC50 = 215 mg/L Lepomis macrochirus 96 h	EC50 = 3300 mg/L 160 min	EC50 = 350 mg/L 48 h	0.08
Carbon tetrachloride	EC50 = 830 mg/L Tetrahymena pyriformis 24 h	LC50 36.3 - 47.3 mg/L Pimephales promelas 96 h LC50 9.68 - 11.3 mg/L Pimephales	EC50 = 34 mg/L 10 min EC50 = 5.6 mg/L 5 min	EC50 = 28 mg/L 24 h EC50 = 29 mg/L 48 h	2.75

promelas 96 h
LC50 23 - 33 mg/L Lepomis
macrochirus 96 h

Persistence and Degradability No information available.
Bioaccumulation No information available.
Mobility No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal Dispose of as hazardous waste in compliance with local and national regulations.
Container Disposal Warning! Container under pressure. Do not puncture. Empty remaining contents. Do not re-use empty containers. Empty containers should be taken for local recycling, recovery, or waste disposal.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Consumer Commodity
Hazard Class ORM-D
Description Consumer Commodity, ORM-D

TDG

Proper shipping name Aerosols Aerosols
Hazard Class 2.2
UN-No UN1950
Description UN1950, Aerosols, 2.2

ICAO

UN-No UN1950
Proper Shipping Name Aerosols, non-flammable
Hazard Class 2.2
Shipping Description UN1950, Aerosols, non-flammable, 2.2, LTD QTY

IATA

UN-No UN1950
Proper Shipping Name Aerosols, non-flammable
Hazard Class 2.2
ERG Code 2L
Shipping Description UN1950, Aerosols, non-flammable, 2.2, LTD QTY

IMDG/IMO

Proper Shipping Name Aerosols, non-flammable
Hazard Class 2.2
UN-No UN1950
EmS No. F-D, S-U
Shipping Description UN1950, Aerosols, non-flammable, 2.2, LTD QTY

15. REGULATORY INFORMATION

Inventories

TSCA Complies
DSL Complies

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Component	CAS-No	Weight %	SARA 313 - Threshold Values
Tetrachloroethylene	127-18-4	30-60	0.1
Methylene chloride	75-09-2	15-40	0.1
Propylene oxide	75-56-9	0.1-1	0.1
Carbon tetrachloride	56-23-5	0.1-1	0.1

SARA 311/312 Hazardous Categorization

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

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Tetrachloroethylene	100 lb	Not applicable
Methylene chloride	1000 lb	Not applicable
Carbon dioxide	Not applicable	Not applicable
Propylene oxide	100 lb	10000 lb TPQ 100 lb
Carbon tetrachloride	10 lb	Not applicable

16. OTHER INFORMATION

Prepared By Rachael Mohochi
Supersedes Date 02/18/2013
Issuing Date 07/17/2013
Reason for Revision No information available.
Glossary No information available.
List of References. No information available.

CERTIFIED LABS, DIV. OF NCH CORP. assumes no responsibility for personal injury or property damage caused by the use, storage, or disposal of the product in a manner not recommended on the product label. Users assume all risks associated with such unrecommended use, storage or disposal of the product. 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.