Material Safety Data Sheet: AERO-STRIP EF AEROSOL

Supercedes Date Not applicable **Issuing Date** 12/16/2010

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name AERO-STRIP EF AEROSOL
Recommended use Stripping solution

Information on Manufacturer
CERTIFIED LABS, DIV. OF NCH CORP.
BOX 152170
IRVING, TEXAS 75015

Product Code 5503
Chemical Nature Halogenated hydrocarbon Solvent mixture

Emergency Telephone Number
CHEMTREC ® 800-424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview
DANGER
Extremely flammable
Harmful if inhaled
Severe skin irritation
Severe eye irritation
May cause allergic skin reaction
Harmful or fatal if swallowed
Contents under pressure

Color Colorless **Physical State** Liquid **Odor** Slight chlorine Solvent

Potential Health Effects

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

Primary Routes of Entry Inhalation, Skin Absorption.

Acute Effects

Eyes Severe eye irritant.

Skin Severe skin irritant. May be absorbed through the skin in harmful amounts. May cause allergic skin reaction. Repeated exposure may cause skin dryness or cracking.

Inhalation Irritating to respiratory system. 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. Inhalation of vapors in high concentration can cause narcotic effects and metabolic acidosis. Irregular cardiac activity. Blood disorder may occur after prolonged inhalation.

Ingestion Irritating to mucous membranes. May cause damage to the kidneys/liver/eyes/brain/digestive system/central nervous system if swallowed. Blood disorder may occur after ingestion. Acidosis. Use of alcoholic beverages may enhance toxic effects. Aspiration hazard if swallowed - can enter lungs and cause damage. May be fatal if swallowed and enters airways.

Chronic Toxicity Causes adverse cardiovascular effects. Repeated and prolonged exposure to solvents may cause brain and nervous system damage. Skin sensitization. Blood disorder may occur after prolonged inhalation. May cause damage to the kidneys/liver/eyes/brain/digestive system/central nervous system if swallowed. Inhalation of vapors in high concentration can cause narcotic effects and metabolic acidosis. May cause cardiac arrhythmia. Suspect reproductive hazard - contains material which may injure unborn child. Contains a known or suspected carcinogen.

Target Organ Effects Blood, Central nervous system, Gastrointestinal tract, Kidney, Liver, Lungs, Respiratory system, Spleen, Eyes, Bone Marrow, Cardiovascular system, Pancreas.

Aggravated Medical Conditions Kidney disorders, Liver disorders, Skin disorders, Respiratory disorders, Blood disorders, Neurological disorders, Heart disease.

Potential Environmental Effects See Section 12 for additional Ecological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No
Butane	106-97-8
Dipropylene glycol mono methyl ether	34590-94-8
Methyl alcohol	67-56-1
Alcohols, C9-11, ethoxylated	68439-46-3
Ethoxylated alcohols C9-16	71243-46-4
Propane	74-98-6
Methylene chloride	75-09-2
Propylene oxide	75-56-9
Paraffin wax	8002-74-2
1-Methyl-2-pyrrolidone	872-50-4

4. FIRST AID MEASURES

General Advice Avoid breathing vapors, mist, or gas. Avoid contact with skin, eyes and clothing.

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 not breathing, give 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.

Notes to Physician Aspiration hazard if swallowed - can enter lungs and cause damage. May cause cardiac arrhythmia. Acidosis. May cause sensitization of susceptible persons.

5. FIRE-FIGHTING MEASURES

Flash Point > 212 °F / > 100 °C **Method** Seta closed cup

Autoignition Temperature No information available.

Flammability Limits in Air % Mixture. **Upper** 36 **Lower** 0.8

Suitable Extinguishing Media
Water spray. Carbon dioxide (CO2). Foam. Dry chemical.

Specific hazards arising from the chemical
Extremely flammable. Solvent vapors are heavier than air and may spread along floors. Vapors may ignite and explode. Material can create slippery conditions. Flame extension: 30 inches / 76 cm and Burnback: 0 inches / 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** 3	**Flammability** 4	**Instability** 0
HMIS	**Health** 3	**Flammability** 4	**Instability** 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment. Remove all sources of ignition. Ensure adequate ventilation. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.
Environmental Precautions 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 Use clean non-sparking tools to collect absorbed material. Pick up and transfer to properly labeled containers.
Neutralizing Agent Not applicable.

7. HANDLING AND STORAGE

Handling Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing.
Storage Keep away from heat and sources of ignition. Keep in a dry, cool and well-ventilated place.

Storage Temperature	**Minimum**	35 °F / 2 °C			**Maximum**	100 °F / 38 °C	
Storage Conditions	**Indoor**	X	**Outdoor**		**Heated**		**Refrigerated**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Butane	: 1000 ppm TWA (listed under Aliphatic hydrocarbon gases: Alkane C1-4) : 1000 ppm TWA	No data available	: 800 ppm TWA; 1900 mg/m^3 TWA
Dipropylene glycol mono methyl ether	Skin : 150 ppm STEL : 100 ppm TWA	: 100 ppm TWA; 600 mg/m^3 TWA Skin	: 600 ppm IDLH : 100 ppm TWA; 600 mg/m^3 TWA 150 ppm STEL; 900 mg/m^3 STEL
Methyl alcohol	TWA: 200 ppm Skin STEL: 250 ppm	TWA: 200 ppm TWA: 260 mg/m^3	IDLH: 6000 ppm STEL 250 ppm STEL 325 mg/m^3 TWA: 200 ppm TWA: 260 mg/m^3
Alcohols, C9-11, ethoxylated	No data available	No data available	No data available
Ethoxylated alcohols C9-16	No data available	No data available	No data available
Propane	: 1000 ppm TWA (listed under Aliphatic hydrocarbon gases: Alkane C1-4) : 1000 ppm TWA	: 1000 ppm TWA; 1800 mg/m^3 TWA	: 2100 ppm IDLH (10% LEL) : 1000 ppm TWA; 1800 mg/m^3 TWA
Methylene chloride	: 50 ppm TWA	: 25 ppm TWA : 125 ppm STEL (see 29 CFR 1910.1052)	: 2300 ppm IDLH
Propylene oxide	: 2 ppm TWA	: 100 ppm TWA; 240 mg/m^3 TWA	: 400 ppm IDLH
Paraffin wax	: 2 mg/m^3 TWA (fume)	No data available	: 2 mg/m^3 TWA (fume)
1-Methyl-2-pyrrolidone	No data available	No data available	No data available

Engineering Measures Use with local exhaust ventilation. Ensure adequate ventilation, especially in confined areas.
Personal Protective Equipment
Eye/Face Protection Tightly fitting safety goggles.
Skin Protection Wear suitable protective clothing, Impervious gloves.
Respiratory Protection 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 Wear protective gloves/clothing. Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	**Viscosity**	Slightly Viscous
Color	Colorless	**Odor**	Slight chlorine Solvent
Appearance	Cloudy	**pH**	Not applicable
Specific Gravity	1.23	**Evaporation Rate**	54.9
Percent Volatile (Volume)	98	**VOC Content (%)**	30.7
VOC Photoreactive (Y/N)	Yes	**VOC Content (g/L)**	378
Vapor Pressure	1007 mmHg @ 70°F	**Vapor Density**	1.9
Solubility	Slightly soluble	**Boiling Point/Range**	105 °F / 41 °C

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, Bases, Amines, Alcohols, Acids, Powdered metals, Phosphorus compounds.
Hazardous Decomposition Products Carbon oxides, Nitrogen oxides (NOx), Aldehydes, Ketones, Hydrogen chloride gas, Chlorine, Phosgene, Organic acids.
Possibility of Hazardous Reactions None under normal processing

11. TOXICOLOGICAL INFORMATION

Product Information No information available.

Component Information

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Butane	no data available	no data available	= 658 mg/L (Rat) 4 h	no data available	no data available
Dipropylene glycol mono methyl ether	= 5230 mg/kg (Rat)	= 9500 mg/kg (Rabbit)	no data available	no data available	no data available
Methyl alcohol	= 5628 mg/kg (Rat)	= 15800 mg/kg (Rabbit)	= 83.2 mg/L (Rat) 4 h = 64000 ppm (Rat) 4 h	no data available	no data available
Alcohols, C9-11, ethoxylated	= 1378 mg/kg (Rat)	> 2 g/kg (Rabbit)	no data available	no data available	no data available
Ethoxylated alcohols C9-16	no data available	no data available	no data available	no data available	no data available
Propane	no data available	no data available	= 658 mg/L (Rat) 4 h	no data available	no data available
Methylene chloride	> 2000 mg/kg (Rat)	no data available	= 76000 mg/m^3 (Rat) 4 h	no data available	no data available
Propylene oxide	= 520 mg/kg (Rat)	no data available	no data available	no data available	no data available
Paraffin wax	> 3750 mg/kg (Rat)	> 3600 mg/kg (Rabbit)	no data available	no data available	no data available
1-Methyl-2-pyrrolidone	= 3598 mg/kg (Rat)	= 2000 mg/kg (Rabbit) = 2500 mg/kg (Rat)	= 3.1 mg/L (Rat) 4 h	no data available	no data available

Chronic Toxicity

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Butane	no data available	no data available	no data available	no data available	CNS
Dipropylene glycol mono methyl ether	no data available	no data available	no data available	no data available	eyes, CNS, respiratory system
Methyl alcohol	no data available	no data available	X	no data available	eyes, CNS, skin, GI tract, respiratory system, kidney, spleen, liver, blood, pancreas, heart
Alcohols, C9-11, ethoxylated	no data available	no data available	no data available	no data available	no data available
Ethoxylated alcohols C9-16	no data available	no data available	no data available	no data available	no data available
Propane	no data available	no data available	no data available	no data available	CNS
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)
Propylene oxide	no data available	skin sensitization	no data available	no data available	eyes, respiratory system, skin (in animals: nasal tumors), CNS, bone marrow
Paraffin wax	no data available	no data available	no data available	no data available	eyes, respiratory system, skin
1-Methyl-2-pyrrolidone	no data available	no data available	no data available	no data available	no data available

Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Other
Butane	not applicable	not applicable	not applicable	not applicable	not applicable
Dipropylene glycol mono methyl ether	not applicable	not applicable	not applicable	not applicable	not applicable
Methyl alcohol	not applicable	not applicable	not applicable	not applicable	not applicable
Alcohols, C9-11, ethoxylated	not applicable	not applicable	not applicable	not applicable	not applicable
Ethoxylated alcohols C9-16	not applicable	not applicable	not applicable	not applicable	not applicable
Propane	not applicable	not applicable	not applicable	not applicable	not applicable
Methylene chloride	A3	Group 2B	Reasonably Anticipated	X	not applicable
Propylene oxide	A3	Group 2B	Reasonably Anticipated	X	not applicable
Paraffin wax	not applicable	not applicable	not applicable	not applicable	not applicable
1-Methyl-2-pyrrolidone	not applicable	not applicable	not applicable	not applicable	not applicable

12. ECOLOGICAL INFORMATION

Product Information
No information available.

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Butane	no data available	no data available	no data available	no data available	2.89
Dipropylene glycol mono methyl ether	no data available	LC50 > 10000 mg/L Pimephales promelas 96 h	no data available	= 1919 mg/L 48 h	-0.064 at 20 °C
Methyl alcohol	no data available	LC50 13500 - 17600 mg/L Lepomis macrochirus 96 h LC50 18 - 20 mL/L Oncorhynchus mykiss 96 h LC50 19500 - 20700 mg/L Oncorhynchus mykiss 96 h LC50 = 28200 mg/L Pimephales promelas 96 h LC50 > 100 mg/L Pimephales promelas 96 h	EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 min	no data available	-0.77
Alcohols, C9-11, ethoxylated	no data available	no data available	no data available	no data available	N/A
Ethoxylated alcohols C9-16	no data available	no data available	no data available	no data available	N/A
Propane	no data available	no data available	no data available	no data available	2.8
Methylene chloride	EC50 > 500 mg/L Pseudokirchneriella subcapitata 72 h EC50 > 500 mg/L Pseudokirchneriella subcapitata 96 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	1532 - 1847 mg/L 48 h = 190 mg/L 48 h	1.25
Propylene oxide	EC50 = 240 mg/L Pseudokirchneriella subcapitata 96 h	LC50 = 215 mg/L Lepomis macrochirus 96 h	EC50 = 3300 mg/L 160 min	= 350 mg/L 48 h	0.08
Paraffin wax	no data available	no data available	no data available	no data available	N/A
1-Methyl-2-pyrrolidone	EC50 > 500 mg/L Desmodesmus subspicatus 72 h	LC50 = 1072 mg/L Pimephales promelas 96 h LC50 = 1400 mg/L Poecilia reticulata 96 h LC50 = 4000 mg/L Leuciscus idus 96 h LC50 = 832 mg/L Lepomis macrochirus 96 h	no data available	= 4897 mg/L 48 h	-0.46 at 25 °C

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

13. DISPOSAL CONSIDERATIONS

Product Disposal Dispose of in accordance with local regulations.
Container Disposal Warning! Container under pressure. Do not puncture. Empty remaining contents. Empty containers should be taken for local recycling, recovery, or waste disposal.

14. TRANSPORT INFORMATION

DOT DOT
Proper Shipping Name Consumer commodity
Hazard Class ORM-D
Description Consumer commodity ,ORM-D,

TDG

Proper shipping name	Aerosols
Hazard Class	2.1
UN-No	UN1950
Description	AEROSOLS,2.1,UN1950, LTD QTY

ICAO

UN-No	UN1950
Proper Shipping Name	Aerosols
Hazard Class	2.1
Shipping Description	Aerosols,UN1950, LTD QTY

IATA

UN-No	UN1950
Proper Shipping Name	Aerosols, flammable
Hazard Class	2.1
ERG Code	10L
Shipping Description	UN1950,Aerosols, flammable,2.1, LTD QTY

IMDG/IMO

Proper Shipping Name	Aerosols
Hazard Class	2
UN-No	UN1950
EmS No.	F-D, S-U
Shipping Description	UN1950, Aerosols,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 40n of the Code of Federal Regulations, Part 372

Component	CAS-No	Weight %	SARA 313 - Threshold Values
Dipropylene glycol mono methyl ether	34590-94-8	1-5	1.0
Methyl alcohol	67-56-1	1-5	1.0
Methylene chloride	75-09-2	60-100	0.1 % de minimis concentration
Propylene oxide	75-56-9	1-5	0.1 % de minimis concentration
1-Methyl-2-pyrrolidone	872-50-4	1-5	1.0 % de minimis concentration

SARA 311/312 Hazardous Categorization

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

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Butane	Not applicable	Not applicable
Dipropylene glycol mono methyl ether	Not applicable	Not applicable
Methyl alcohol	5000 lb	Not applicable
Alcohols, C9-11, ethoxylated	Not applicable	Not applicable
Ethoxylated alcohols C9-16	Not applicable	Not applicable
Propane	Not applicable	Not applicable
Methylene chloride	Not applicable	Not applicable
Propylene oxide	Not applicable	10000 lb TPQ 100 lb EPCRA RQ
Paraffin wax	Not applicable	Not applicable
1-Methyl-2-pyrrolidone	Not applicable	Not applicable

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.

WHMIS Hazard Class

A Compressed gases, B5 Flammable aerosol, D1B Toxic materials, D2B Toxic materials.

16. OTHER INFORMATION

Prepared By	Mike McDowell
Supercedes Date	Not applicable
Issuing Date	12/16/2010
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.