Material Safety Data Sheet: CHEM-GUARD AEROSOL

Supercedes Date 06/28/2004 **Issuing Date** 08/11/2010

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name CHEM-GUARD AEROSOL
Recommended Use Clear coating

Information on Manufacturer
CHEMSEARCH DIV. OF NCH CORP.
BOX 152170
IRVING, TX 75015

Product Code 5008
Chemical Nature Solvent-borne coatings

Emergency Telephone Number
CHEMTREC ® 800-424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview
DANGER!
Extremely flammable
Vapors may cause flash fire or explosion
Harmful if inhaled
Causes skin irritation
Severe eye irritation
Harmful or fatal if swallowed
Contents under pressure

Color Colorless **Physical State** Aerosol **Odor** Aromatic

Potential Health Effects

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

Primary Routes of Entry Inhalation, Skin Absorption.

Acute Effects

Eyes Severe irritation.

Skin Causes skin irritation. May be absorbed through the skin in harmful amounts. Blood disorder may occur after prolonged skin contact. Acidosis.

Inhalation May cause irritation of respiratory tract. 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.

Ingestion Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration hazard if swallowed - can enter lungs and cause damage. May be fatal if swallowed and enters airways.

Chronic Toxicity Repeated and prolonged exposure to solvents may cause brain and nervous system damage, Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood, May cause disorder and damage to the spleen, Risk of serious damage to the lungs (by inhalation), Contains a known or suspected reproductive toxin.

Target Organ Effects Central nervous system, Liver, Kidney, Heart, Blood, Bone Marrow, Spleen.

Aggravated Medical Conditions Liver disorders, Kidney disorders, Skin disorders, Respiratory disorders, Neurological disorders.

Potential Environmental Effects See Section 12 for additional Ecological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No
Toluene	108-88-3
Propane	74-98-6
Butane	106-97-8
Isobutyl acetate	110-19-0
Acetone	67-64-1
n-Amyl acetate	628-63-7
Ethylene glycol monopropyl ether	2807-30-9

4. 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. Get medical attention immediately.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention if irritation develops and persists. Wash contaminated clothing before re-use.

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.

Notes to Physician Aspiration hazard if swallowed - can enter lungs and cause damage.

5. FIRE-FIGHTING MEASURES

Flash Point -2°F/-19°C **Method** Tag closed cup

Autoignition Temperature No information available.

Flammability Limits in Air % Mixture. **Upper** 10.9 **Lower** 1.1

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

Specific hazards arising from the chemical
Extremely flammable. Solvent vapors are heavier than air and may spread along floors. Vapors may ignite and explode. Flame extension: 30 inches / 75 cm and Burnback: 5.5 inches / 14 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) - 3

NFPA	**Health** 2	**Flammability** 4	**Instability** 0
HMIS	**Health** 2	**Flammability** 4	**Instability** 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Wear protective gloves/clothing. 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. Avoid breathing vapors, mist or gas. 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** 120°F/49°C

Storage Conditions **Indoor** X **Outdoor** **Heated** **Refrigerated**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Toluene	20 ppm TWA	200 ppm TWA : 300 ppm Ceiling	500 ppm IDLH : 100 ppm TWA; 375 mg/m^3 TWA 150 ppm STEL; 560 mg/m^3 STEL
Propane	1000 ppm TWA	1000 ppm TWA; 1800 mg/m^3 TWA	2100 ppm IDLH (10% LEL) : 1000 ppm TWA; 1800 mg/m^3 TWA
Butane	1000 ppm TWA	No data available	800 ppm TWA; 1900 mg/m^3 TWA
Isobutyl acetate	150 ppm TWA	150 ppm TWA; 700 mg/m^3 TWA	1300 ppm IDLH (10% LEL) : 150 ppm TWA; 700 mg/m^3 TWA
Acetone	750 ppm STEL : 500 ppm TWA	1000 ppm TWA; 2400 mg/m^3 TWA	2500 ppm IDLH (10% LEL) : 250 ppm TWA; 590 mg/m^3 TWA
n-Amyl acetate	100 ppm STEL : 50 ppm TWA	100 ppm TWA; 525 mg/m^3 TWA	1000 ppm IDLH : 100 ppm TWA; 525 mg/m^3 TWA
Ethylene glycol monopropyl ether	No data available	No data available	No data available

Engineering Measures Ensure adequate ventilation, especially in confined areas. Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal Protective Equipment

Eye/Face Protection 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 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	Aerosol	**Viscosity**	Non viscous
Color	Colorless	**Odor**	Aromatic
Appearance	Transparent	**pH**	Not applicable
Specific Gravity	0.75	**Evaporation Rate**	>1 (Butyl acetate=1)
Percent Volatile (Volume)	88	**VOC Content (%)**	64.1
VOC Content (g/L)	624.1	**Vapor Pressure**	2068 mmHg @ 70 °F
Vapor Density	>1	**Solubility**	Negligible
Boiling Point/Range	-47°F/-44°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

Hazardous Decomposition Products Carbon oxides

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
Toluene	636 mg/kg (Rat)	12124 mg/kg (Rat) 8390 mg/kg (Rabbit)	26700 ppm (Rat) 1 h 12.5 mg/L (Rat) 4 h	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
Butane	no data available	no data available	658 mg/L (Rat) 4 h	no data available	no data available
Isobutyl acetate	13400 mg/kg (Rat)	5000 mg/kg (Rabbit)	no data available	no data available	no data available
Acetone	5800 mg/kg (Rat)	no data available	no data available	no data available	no data available
n-Amyl acetate	1600 mg/kg (Rat)	no data available	no data available	no data available	no data available
Ethylene glycol monopropyl ether	3089 mg/kg (Rat)	960 µL/kg (Rabbit)	no data available	no data available	no data available

Chronic Toxicity

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Toluene	no data available	no data available	X	no data available	CNS, eyes, kidneys, liver, respiratory system, skin, heart
Propane	no data available	no data available	no data available	no data available	CNS
Butane	no data available	no data available	no data available	no data available	CNS
Isobutyl acetate	no data available	no data available	no data available	no data available	eyes, CNS, respiratory system, skin
Acetone	no data available	no data available	no data available	no data available	eyes, CNS, respiratory system, skin
n-Amyl acetate	no data available	no data available	no data available	no data available	eyes, CNS, respiratory system, skin
Ethylene glycol monopropyl ether	no data available	no data available	X	no data available	CNS, liver, kidney, spleen, blood, bone marrow

Carcinogenicity There are no known carcinogenic chemicals in this product.

Component	ACGIH	IARC	NTP	OSHA	Other
Toluene	not applicable	not applicable	not applicable	not applicable	not applicable
Propane	not applicable	not applicable	not applicable	not applicable	not applicable
Butane	not applicable	not applicable	not applicable	not applicable	not applicable
Isobutyl acetate	not applicable	not applicable	not applicable	not applicable	not applicable
Acetone	not applicable	not applicable	not applicable	not applicable	not applicable
n-Amyl acetate	not applicable	not applicable	not applicable	not applicable	not applicable
Ethylene glycol monopropyl ether	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
Toluene	EC50= 12.5 mg/L Pseudokirchneriella subcapitata 72 h EC50> 433 mg/L Pseudokirchneriella subcapitata 96 h	LC50 11.0-15.0 mg/L Lepomis macrochirus 96 h LC50 14.1-17.16 mg/L Oncorhynchus mykiss 96 h LC50 15.22-19.05 mg/L Pimephales promelas 96 h LC50 5.89-7.81 mg/L Oncorhynchus mykiss 96 h LC50 50.87-70.34 mg/L Poecilia reticulata 96 h LC50= 12.6 mg/L Pimephales promelas 96 h LC50= 28.2 mg/L Poecilia reticulata 96 h LC50= 5.8 mg/L Oncorhynchus mykiss 96 h LC50= 54 mg/L Oryzias latipes 96 h	EC50 = 19.7 mg/L 30 min	EC50 5.46 - 9.83 mg/L 48 h EC50 = 11.5 mg/L 48 h	2.65
Propane	no data available	no data available	no data available	no data available	<=2.8 2.3
Butane	no data available	no data available	no data available	no data available	<=2.8 2.89
Isobutyl acetate	no data available	LC50 101-123 mg/L Leuciscus idus melanotus 48 h LC50= 101 mg/L Leuciscus idus melanotus 48 h	no data available	EC50 = 168 mg/L 24 h	1.72
Acetone	no data available	LC50 4.74-6.33 ml/L Oncorhynchus mykiss 96 h LC50 6210-8120 mg/L Pimephales promelas 96 h LC50= 8300 mg/L Lepomis macrochirus 96 h	EC50 = 14500 mg/L 15 min	EC50 10294 - 17704 mg/L 48 h EC50 12600 - 12700 mg/L 48 h	-0.24
n-Amyl acetate	no data available	LC50= 650 mg/L Lepomis macrochirus 96 h	no data available	no data available	N/A
Ethylene glycol monopropyl ether	no data available	no data available	no data available	no data available	N/A

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. Empty remaining contents. Do not puncture. 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
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	2.1
UN-No	UN1950
EmS No.	F-D, S-U
Shipping Description	UN1950, Aerosols,2.1 LIMITED QUANTITIES

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
Toluene	108-88-3	15-40	1.0 % de minimis concentration
Ethylene glycol monopropyl ether	2807-30-9	3-7	1.0

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
Toluene	Not applicable	Not applicable
Propane	Not applicable	Not applicable
Butane	Not applicable	Not applicable
Isobutyl acetate	Not applicable	Not applicable
Acetone	Not applicable	Not applicable
n-Amyl acetate	Not applicable	Not applicable
Ethylene glycol monopropyl ether	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, D2A Very toxic materials, D2B Toxic materials.

16. OTHER INFORMATION

Prepared By	Mike McDowell
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Reason for Revision	No information available.
Glossary	No information available.
List of References.	No information available.

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