Material Safety Data Sheet: SS-80 PLUS AEROSOL

Supercedes Date 02/18/2013 **Issuing Date** 07/17/2013

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name SS-80 PLUS AEROSOL
Recommended use Solvent mixture
Information on Manufacturer
CHEMSEARCH DIV. OF NCH CORP.
BOX 152170
IRVING, TX 75015

Product Code 5310
Chemical nature Halogenated hydrocarbon
Emergency Telephone Number
CHEMTREC® 800-424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview
DANGER
Harmful if inhaled
Severe skin irritation
Causes severe eye irritation
Harmful or fatal if swallowed
Contents under pressure

Color Colorless **Physical State** Liquid **Odor** Ether-like

Potential Health Effects	
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 vapors in high concentration can cause narcotic effects and metabolic acidosis.
Ingestion	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.
Potential Environmental Effects	See Section 12 for additional Ecological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No
Tetrachloroethylene	127-18-4
Methylene chloride	75-09-2
Carbon dioxide	124-38-9
Propylene oxide	75-56-9
Carbon tetrachloride	56-23-5

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

Autoignition Temperature No information available.

Flammability Limits in Air % Solvent mixture. **Upper** 23 **Lower** 13

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO2). 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
HMIS	**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 Pick up and transfer to properly labeled containers

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 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 Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	**Viscosity**	Non viscous
Color	Colorless	**Odor**	Ether-like
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	**Boiling Point/Range**	> 154 °F / 68 °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, 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 No information available.

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,kidne

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	LC50 140.8 - 277.8 mg/L Pimephales promelas 96 h LC50 262 - 855 mg/L Pimephales	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

	EC50 > 500 mg/L Pseudokirchneriella subcapitata 72 h	promelas 96 h LC50 = 193 mg/L Lepomis macrochirus 96 h			
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 promelas 96 h LC50 23 - 33 mg/L Lepomis macrochirus 96 h	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

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, non-flammable
- **Hazard Class** 2.2
- **UN-No** UN1950
- **Description** UN1950, Aerosols, non-flammable, 2.2, LTD QTY

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

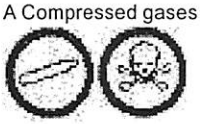
Component	Hazardous Substances RQs	CERCLA EHS RQs
Tetrachloroethylene	100 lb	Not applicable
Methylene chloride	1000 lb	Not applicable
Carbon dioxide	Not applicable	Not applicable
Propylene oxide	100 lb	10000 lb TPQ 100 lb
Carbon tetrachloride	10 lb	Not applicable

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 D1B Toxic materials D2A Very toxic materials D2B Toxic materials



16. OTHER INFORMATION

Prepared By	Rachael Mohochi
Supercedes 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.

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