

SAFETY DATA SHEET

Date Issued : 1/8/2014
MSDS No : CA398
Date Revised : 11/4/2014
Revision No : 16

CHEM-SET™ AW-315M

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: CHEM-SET™ AW-315M

MANUFACTURER

Chemical Concepts
 410 Pike Road
 Huntingdon Valley, PA. 19006

Phone:800.220.1966

24 HR. EMERGENCY TELEPHONE NUMBERS

INFOTRAC: 1.800.535.5053

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Acute Toxicity (Oral), Category 4
 Skin Irritation, Category 2
 Eye Irritation, Category 2A
 Respiratory Sensitization, Category 1
 Skin Sensitization, Category 1
 Mutagenicity, Category 2
 Carcinogenicity, Category 1B
 Reproductive Toxicity, Category 1B
 Target Organ Toxicity (Single exposure), Category 1
 Target Organ Toxicity (Single exposure), Category 3
 Target Organ Toxicity (Repeated exposure), Category 1
 Aspiration Hazard, Category 1

Environmental:

Acute Hazards to the Aquatic Environment, Category 3
 Chronic Hazards to the Aquatic Environment, Category 3

GHS LABEL



Exclamation
mark



Health
hazard

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H302: Harmful if swallowed.
 H304: May be fatal if swallowed and enters airways.
 H315: Causes skin irritation.
 H317: May cause an allergic skin reaction.
 H319: Causes serious eye irritation.
 H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 H336: May cause drowsiness or dizziness.

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H341: Suspected of causing genetic defects.
H350: May cause cancer.
H360: May damage fertility or the unborn child.
H370: Causes damage to organs.
H372: Causes damage to organs through prolonged or repeated exposure.
H402: Harmful to aquatic life.
H412: Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENT(S)

Prevention:

[201]: P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P264: Wash hands, forearms, and other exposed areas thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P284: Wear respiratory protection.

Response:

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P314: Get medical advice/attention if you feel unwell.
P321: Specific treatment (see section 4).
P330: Rinse mouth.
P331: Do NOT induce vomiting.
P332+P313: If skin irritation occurs: Get medical advice/attention.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P337+P313: If eye irritation persists: Get medical advice/attention.
P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P362: Take off contaminated clothing and wash before reuse.

Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P405: Store locked up.

Disposal:

P501: Dispose of contents/container according to local, regional, national, and international regulations.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Contains methylene chloride and trichloroethylene which are nonflammable liquids with a mildly sweet odor.

IMMEDIATE CONCERNS: Contains methylene chloride and trichloroethylene which are harmful if inhaled. Can

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also cause skin and eye irritation. Methylene Chloride and Trichloroethylene are possible cancer hazards. May cause cancer based on animal data.

POTENTIAL HEALTH EFFECTS

EYES: Can cause moderate to severe eye irritation with temporary damage possible.

SKIN: Prolonged or repeated contact of liquid can cause irritation, defatting of skin, and dermatitis. Prolonged single exposure can result in a progressively severe burning sensation or redness.

SKIN ABSORPTION: Can be absorbed through the skin but not in sufficient amounts to cause adverse effects.

INGESTION: Low toxicity if swallowed. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Aspiration into the lungs may occur during ingestion or vomiting, resulting in rapid absorption and injury to other body systems.

INHALATION: Inhalation is the major potential route of exposure. Exposure to high concentrations of vapor or mist can cause central nervous system depression with symptoms of headache, dizziness, stupor, loss of consciousness or death depending on concentration and duration of exposure. Exposure to high concentrations can cause irregular heartbeat, cardiac arrest and death. Overexposure has been shown to cause adverse effects on the lungs, liver, kidney, nervous system and internal organs. Carboxyhemoglobin levels can be elevated in persons exposed to methylene chloride and can cause a substantial stress on the cardiovascular system.

CARCINOGENICITY: Methylene chloride has caused cancer in certain laboratory animal tests. IARC has classified methylene chloride in Group 2B as a substance considered possibly carcinogenic to humans. Methylene chloride appears on the NTP carcinogen list.

MEDICAL CONDITIONS AGGRAVATED: Alcoholism, acute and chronic liver and kidney disease, chronic lung disease, anemia, coronary disease or rhythm disorders of the heart. Exposure can result in cardiac sensitization and increase the risk of cardiac arrest.

ROUTES OF ENTRY: Inhalation is the major potential route of entry.

CANCER STATEMENT: Methylene chloride has caused cancer in certain laboratory animal tests. IARC has classified methylene chloride in Group 2B as a substance considered possibly carcinogenic to humans. Methylene chloride appears on the NTP carcinogen list.

IRRITANCY: Slight to moderate eye and skin irritation.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
Dichloromethane	45 - 70	75-09-2
Trichloroethylene	3 - 10	79-01-6
Ethanol	1 - 5	64-17-5

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of tempered water (at least 15-20 minutes) lifting upper and lower eye lids occasionally. Get immediate medical attention.

SKIN: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Thoroughly wash or discard clothing and shoes before reuse.

INGESTION: Do not induce vomiting. Get medical attention immediately. Never give anything by mouth to an

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unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Causes eye irritation.

SKIN: Mild to moderate skin irritant.

SKIN ABSORPTION: Can be absorbed through the skin but not in sufficient amounts to cause adverse effects.

INGESTION: Single dose toxicity low to moderate.

INHALATION: Exposure to high concentrations of vapor or mist can cause central nervous system depression with symptoms of headache, dizziness, stupor, loss of consciousness or death depending on concentration and duration of exposure. Exposure to high concentrations can cause irregular heartbeat, cardiac arrest and death. Overexposure has been shown to cause adverse effects on the lungs, liver, kidney, nervous system and internal organs.

CHRONIC EFFECTS: Prolonged overexposure has caused toxic effects on the liver and kidneys.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: Class IIIB

GENERAL HAZARD: Toxic liquid.

EXTINGUISHING MEDIA: Water spray, carbon dioxide, dry chemical or foam.

HAZARDOUS COMBUSTION PRODUCTS: Hydrogen chloride, carbon monoxide, carbon dioxide, and trace amounts of phosgene and chlorine

FIRE FIGHTING PROCEDURES: Concentrated vapors can be ignited by a high intensity energy source. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Use water spray to keep fire exposed containers cool. Extinguish using an agent suitable for surrounding fire. Firefighters should wear self-contained breathing apparatus with pressure demand, full face piece SCBA (MSHA/NIOSH approved or equivalent) and full protective gear.

SENSITIVE TO STATIC DISCHARGE: Not Applicable

SENSITIVITY TO IMPACT: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride and trace amounts of phosgene and chlorine.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on absorbent, such as sawdust or vermiculite, and sweep into closed containers for disposal. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal. Only those persons who are adequately trained, authorized, and wearing the appropriate personal protective equipment (PPE) should participate in spill response and clean-up.

LARGE SPILL: Keep spectators away. Only those persons who are adequately trained, authorized and wearing the required personal protective equipment (PPE) should participate in spill response and clean-up. Know and prepare for spill response before using or handling this product. Dike and contain spill with inert material (e.g. sand, earth). Transfer liquids to covered and labeled containers for disposal. Use appropriate PPE. Place absorbent diking materials in covered containers for disposal. Prevent contamination of sewers, streams, and groundwater with spilled material or used absorbent.

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7. HANDLING AND STORAGE

GENERAL PROCEDURES: For professional or industrial use only. Follow label instructions. Keep out of the reach of children. Not for consumption. No smoking. Do not breathe vapors. Avoid contact with body. Empty containers must not be washed and re-used for any purpose. Contact lens wearers must wear protective eye wear around chemical vapors and liquid. Wash hands thoroughly after handling. To prevent build-up of vapors, use adequate natural and/or mechanical ventilation (e.g. open all windows and doors to achieve cross ventilation).

HANDLING: Use with sufficient ventilation to keep employee exposure below recommended limits. Provide adequate ventilation for storage, handling and use, especially for enclosed or low spaces. Avoid contact of liquid with eyes and prolonged skin exposure. Follow all SDS/label precautions even after container is emptied because they may retain product residues.

STORAGE: Keep container closed when not in use. Store in a dry, well ventilated area, out of the sun and away from ignition sources. Do not remove or deface label. Prevent water or moist air from entering container.

STORAGE TEMPERATURE: 15.5°C (60°F) Minimum to 35°C (95°F) Maximum

SHELF LIFE: 9 months from manufacture date

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)

		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³
Dichloromethane	TWA	25 ppm	NL	50 ppm	174 mg/m ³
	STEL	125 ppm	NL	NL [1]	NL [1]
Trichloroethylene	TWA	100 ppm [1]	NL mg/m ³ [1]	50 ppm	269 mg/m ³
	STEL	200(C) ppm [2]	NL mg/m ³ [2]	100 ppm	537 mg/m ³
Ethanol	TWA	1000 ppm	1900 mg/m ³	1000 ppm	1880 mg/m ³
	STEL	NL [1]	NL [1]	NL [1]	NL [1]

Footnotes:

- NL = Not Listed
- C = Ceiling

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use only in a well ventilated area. To determine exposure levels, monitoring should be performed as outlined by OSHA Standard 29 CFR 1910.1052.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields. A face shield may be necessary if spraying the product.

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SKIN: Wear chemical resistant gloves such as Viton, PVA or equivalent. Wear chemical protective clothing & boots to prevent repeated or prolonged skin contact.

RESPIRATORY: Where vapor concentrations exceed or are likely to exceed the occupational exposure limits, a NIOSH approved continuous flow supplied air respirator, hood or helmet is recommended. A NIOSH approved self-contained positive pressure breathing apparatus with full face piece is required for spills and/or emergencies.

WORK HYGIENIC PRACTICES: Use good hygiene practices when handling this material. Wash hands thoroughly after use.

OTHER USE PRECAUTIONS: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Mildly sweet odor

ODOR THRESHOLD: Not Determined

COLOR: Clear or Blue

pH: Not Determined

PERCENT VOLATILE: 70.7

Notes: by weight

FLASHPOINT AND METHOD: None

FLAMMABLE LIMITS: 8.0 to 28.0

AUTOIGNITION TEMPERATURE: (770°F) to (1033°F)

VAPOR PRESSURE: Not Determined

VAPOR DENSITY: Not Determined

BOILING POINT: 39.8°C (104°F) to 87°C (188.6°F)

FREEZING POINT: Not Determined

MELTING POINT: Not Determined

POUR POINT: Not Determined

SOLUBILITY IN WATER: Not Determined

EVAPORATION RATE: < 1.0 (n-Butyl Acetate=1)

DENSITY: 9.99 lbs/gal

PARTICLE SIZE: Not Determined

SPECIFIC GRAVITY: 1.199

VISCOSITY: Not Determined

MOLECULAR WEIGHT: Not Determined

(VOC): 244.600 gr/L EPA Method 24 VOC

Notes: Photochemically Reactive Only VOC: 107.3 gr/L

COEFF. OIL/WATER: Not Determined

OXIDIZING PROPERTIES: Not Determined

COMMENTS: 2.33 lb VHAP/lb Solid

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68.4% by weight HAP

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

STABILITY: Stable.

POLYMERIZATION: Product will not undergo polymerization.

CONDITIONS TO AVOID: Avoid contact with open flame, electric arcs, or other hot surfaces which can cause thermal decomposition.

POSSIBILITY OF HAZARDOUS REACTIONS: None Expected.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride and trace amounts of phosgene and chlorine.

INCOMPATIBLE MATERIALS: Strong alkalis, oxygen, nitrogen peroxide, sodium, potassium, and other oxidizers and reactive metals.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Dichloromethane	985 to 1600 mg/kg	> 2000 mg/kg	52 mg/L (4- hr dose)
Trichloroethylene	4920 mg/kg	10000 mg/kg	12500 ppm (4-hr dose)
Ethanol	7060 mg/kg	No data	66000 mg/L (4-hr dose)

CHRONIC: Adverse effects on the liver and kidneys have been reported on laboratory animals. The finding of chronic toxic effects in laboratory animals may indicate toxicity to humans.

CARCINOGENICITY

Chemical Name	NTP Status	IARC Status	OSHA Status
Dichloromethane	2	2B	X
Trichloroethylene	Reasonably anticipated to be a human carcinogen.	2A	

IARC: Group 2B Animal Carcinogen

NTP: Animal Carcinogen

Notes: This product contains methylene chloride and trichloroethylene, two chemicals known to the State of California to cause cancer.

IRRITATION: Mild to moderate eyes and skin irritation.

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REPRODUCTIVE EFFECTS: Laboratory animal studies on mice, rats and rabbits have been conducted to evaluate the potential reproductive and developmental effects of methylene chloride exposures. Methylene chloride exposure has not been shown to cause teratogenic effects (birth defects) in experimental animals.

MUTAGENICITY: Methylene chloride has been evaluated for its potential to induce genotoxic effects in both in vivo and in vitro systems with mixed results. Based on this evidence, methylene chloride exposure may be considered to be a weak mutagen in mammalian systems.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: This product contains components that may be harmful to aquatic organisms and may cause long term adverse effects in the aquatic environment.

ECOTOXICOLOGICAL INFORMATION: Contains components that are potentially toxic to freshwater and saltwater ecosystems.

BIOACCUMULATION/ACCUMULATION: Contains components with the potential to bio-accumulate.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of in accordance with all local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Toxic Liquid, Organic, N.O.S.

PRIMARY HAZARD CLASS/DIVISION: 6.1

UN/NA NUMBER: 2810

PACKING GROUP: III

NAERG: 153

MARINE POLLUTANT #1: None

OTHER SHIPPING INFORMATION: contains (Dichloromethane, Trichloroethylene)

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION



Poison

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

FIRE: No **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** Yes

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EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt. %	CAS
Dichloromethane	45 - 70	75-09-2
Trichloroethylene	3 - 10	79-01-6

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

Chemical Name	Wt. %	CERCLA RQ
Dichloromethane	45 - 70	2200 kg
Trichloroethylene	3 - 10	100

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Dichloromethane	75-09-2
Trichloroethylene	79-01-6
Ethanol	64-17-5

CLEAN AIR ACT

Chemical Name	Wt. %	CAS
Dichloromethane	45 - 70	75-09-2
Trichloroethylene	3 - 10	79-01-6

STATES WITH SPECIAL REQUIREMENTS

Chemical Name	Requirements
Dichloromethane	New Jersey Right to Know List Pennsylvania Right to Know List Massachusetts Toxic Use Reduction Act (TURA) Reportable Chemical
Trichloroethylene	New Jersey Right to Know List Pennsylvania Right to Know List Massachusetts Toxic Use Reduction Act (TURA) Reportable Chemical
Ethanol	New Jersey Right to Know List Pennsylvania Right to Know List

CALIFORNIA PROPOSITION 65

Chemical Name	Wt. %	Listed
Dichloromethane	45 - 70	Cancer
Trichloroethylene	3 - 10	Cancer

CANADA

WHMIS HAZARD SYMBOL AND CLASSIFICATION

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Poison

16. OTHER INFORMATION

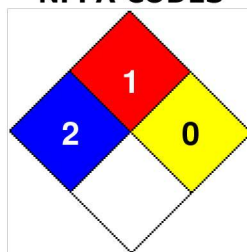
INFORMATION CONTACT: (781) 878-7015

REVISION SUMMARY: This MSDS replaces the 11/4/2014 MSDS.

HMIS RATING

HEALTH		2
FLAMMABILITY		1
PHYSICAL HAZARD		0
PERSONAL PROTECTION		B

NFPA CODES



GENERAL STATEMENTS: Keep out of reach of children
 For professional or industrial use only

MANUFACTURER DISCLAIMER: This document may be used to comply with OSHA's Hazardous Communication Standard, 29 CFR 1910.1200.

To the best of our knowledge, the information contained in this SDS is accurate. It is intended to assist the user in his/her evaluation of the product's hazards and safety precautions to be taken in its use. The data in this SDS relate only to the specific material designated herein. We do not assume liability for the use of, or reliance on this information, nor do we guarantee its accuracy or completeness.

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