

SC-325

Safety Data Sheet

Issue Date: 15-May-2012

Revision Date: 03-Dec-2014

Version 1

1. IDENTIFICATION

Product Identifier

Product Name SC 325

Other means of identification

SDS # CIP-015

UN/ID No UN1992

Recommended use of the chemical and restrictions on use

Recommended Use Adhesive.

Details of the supplier of the safety data sheet

Supplier Address

Caseway Industrial Products, Inc.
3487 Highland Drive
Bay City, MI 48706
Ph: 989-391-9992
Fax: 989-391-9994

Emergency Telephone Number

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America) Contract # 106140
Contact manufacturer for all non-emergency calls

2. HAZARDS IDENTIFICATION

Appearance Clear colorless liquid

Physical State Liquid

Odor Ether-like

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Carcinogenicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Flammable Liquids	Category 2

Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed

Signal Word

Danger

Hazard Statements

Causes skin irritation
Causes serious eye irritation
May cause cancer
May cause respiratory irritation. May cause drowsiness or dizziness
May cause damage to organs through prolonged or repeated exposure
Highly flammable liquid and vapor



Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Wear eye/face protection
 Do not breathe dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use explosion-proof equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge
 Keep cool

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 Get medical attention
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse
 If skin irritation persists: Get medical advice/attention immediately
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Immediately call a poison center or doctor/physician
 IN CASE OF FIRE: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Tetrahydrofuran	109-99-9	40-60
Dichloromethane	75-09-2	40-60

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

General Advice	Provide this SDS to medical personnel for treatment.
Eye Contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician or poison control center immediately.
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Get medical attention immediately.

Most important symptoms and effects

Symptoms	Overexposure by inhalation may cause CNS depression- drowsiness, dizziness, confusion or loss of coordination. May cause skin and eye irritation. Will cause gastrointestinal tract irritation.
-----------------	---

Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
---------------------------	------------------------

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water fog or fine spray, carbon dioxide, dry chemical, foam.

Unsuitable Extinguishing Media Water jet.

Specific Hazards Arising from the Chemical

Highly flammable liquid and vapor. Vapor concentrated in a confined or poorly ventilated area can be ignited upon contact with a high energy spark, flame, or high intensity heat source.

Hazardous Combustion Products Hydrogen chloride, trace amounts of phosgene, chlorine, and carbon monoxide.

Sensitivity to Static Discharge Take precautionary measures against static discharge.

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Wear protective clothing as described in Section 8 of this safety data sheet. Remove all sources of ignition. The wet contaminated surface may be slippery.
Environmental Precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment	Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite).
Methods for Clean-Up	Use clean non-sparking tools to collect absorbed material. Sweep up absorbed material and shovel into suitable containers for disposal. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations. For waste disposal, see section 13 of the SDS. Wash spill area with a mild detergent.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on Safe Handling	Handle in accordance with good industrial hygiene and safety practice. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear appropriate personal protective equipment. Wash face, hands, and any exposed skin thoroughly after handling. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Use only in well-ventilated areas. Keep containers closed when not in use. Do not breathe vapors or spray mist. Do not eat, drink or smoke when using this product. Ground/bond container and receiving equipment. Use spark-proof tools and explosion-proof equipment. Take precautionary measures against static discharges.
--------------------------------	--

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Protect from damp. Store away from heat and incompatible materials.
Incompatible Materials	Oxidizing agents. Strong bases. Zinc powders. Aluminum powders. Magnesium powders. Potassium. Sodium.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Tetrahydrofuran 109-99-9	STEL: 100 ppm TWA: 50 ppm S*	TWA: 200 ppm TWA: 590 mg/m ³ (vacated) TWA: 200 ppm (vacated) TWA: 590 mg/m ³ (vacated) STEL: 250 ppm (vacated) STEL: 735 mg/m ³	IDLH: 2000 ppm TWA: 200 ppm TWA: 590 mg/m ³ STEL: 250 ppm STEL: 735 mg/m ³
Dichloromethane 75-09-2	TWA: 50 ppm	TWA: 25 ppm (vacated) TWA: 500 ppm (vacated) STEL: 2000 ppm 5 min in any 3 h (vacated) Ceiling: 1000 ppm STEL: 125 ppm see 29 CFR 1910.1052	IDLH: 2300 ppm

Appropriate engineering controls

Engineering Controls	Good ventilation is required. Maintain eye wash fountain and quick-drench facilities in work area.
-----------------------------	--

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Splash goggles or safety glasses.
Skin and Body Protection	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory Protection Ensure adequate ventilation, especially in confined areas. Use NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists.

General Hygiene Considerations Avoid contact with skin, eyes and clothing. After handling this product, wash hands before eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown on section 4 of this SDS. Launder contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Odor	Ether-like
Appearance	Clear colorless liquid	Odor Threshold	Not determined
Color	Clear Colorless		
<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>	
pH	Not determined		
Melting Point/Freezing Point	Not determined		
Boiling Point/Boiling Range	66 °C / 151 °F		
Flash Point	-14 / 6.8		
Evaporation Rate	Not determined		
Flammability (Solid, Gas)	Not determined		
Upper Flammability Limits	11.8%		
Lower Flammability Limit	2.0%		
Vapor Pressure	129 mmHg	@ 20°C (68°F)	
Vapor Density	2.5	(Air=1)	
Specific Gravity	0.88		
Water Solubility	1.3%	@ 25 °C (77 °F)	
Solubility in other solvents	Not determined		
Partition Coefficient	Not determined		
Auto-ignition Temperature	321 °C / 610		
Decomposition Temperature	Not determined		
Kinematic Viscosity	Not determined		
Dynamic Viscosity	Not determined		
Explosive Properties	Not determined		
Oxidizing Properties	Not determined		

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions to Avoid

Heat, flames and sparks.

Incompatible Materials

Oxidizing agents. Strong bases. Zinc powders. Aluminum powders. Magnesium powders. Potassium. Sodium.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Causes serious eye irritation.
Skin Contact	Causes skin irritation.
Inhalation	May be harmful if inhaled. May cause irritation to the mucous membranes and upper respiratory tract.
Ingestion	Ingestion may cause irritation to mucous membranes. May be harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Dichloromethane 75-09-2	> 2000 mg/kg (Rat)	-	= 76000 mg/m ³ (Rat) 4 h

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity May cause cancer.

Chemical Name	ACGIH	IARC	NTP	OSHA
Tetrahydrofuran 109-99-9	A3			
Dichloromethane 75-09-2	A3	Group 2B	Reasonably Anticipated	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)
 A3 - Animal Carcinogen
IARC (International Agency for Research on Cancer)
 Group 2B - Possibly Carcinogenic to Humans
NTP (National Toxicology Program)
 Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
 X - Present

STOT - single exposure May cause respiratory irritation. May cause drowsiness or dizziness.

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Other Adverse Effects In confined or poorly ventilated areas, vapors can readily accumulate and can cause unconsciousness and death. Excessive exposure may cause irritation to upper respiratory tract (nose and throat). May cause carboxyhemoglobinemia, thereby impairing the blood's ability to transport oxygen. Minimal anesthetic or narcotic effects may be seen in the range of 500-1000 ppm methylene chloride. Higher levels over 1000 ppm can cause dizziness, drunkenness, and as low as 10,000 ppm, unconsciousness and death. These high levels may also cause cardiac arrhythmias (irregular heartbeats).

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Tetrahydrofuran 109-99-9		1970 - 2360: 96 h Pimephales promelas mg/L LC50 flow-through 2700 - 3600: 96 h Pimephales promelas mg/L LC50 static		
Dichloromethane 75-09-2	500: 96 h Pseudokirchneriella subcapitata mg/L EC50 500: 72 h Pseudokirchneriella subcapitata mg/L EC50	140.8 - 277.8: 96 h Pimephales promelas mg/L LC50 flow-through 262 - 855: 96 h Pimephales promelas mg/L LC50 static 193: 96 h Lepomis macrochirus mg/L LC50 static 193: 96 h Lepomis macrochirus mg/L LC50 flow-through	EC50 = 1 mg/L 24 h EC50 = 2.88 mg/L 15 min	1532 - 1847: 48 h Daphnia magna mg/L EC50 Static 190: 48 h Daphnia magna mg/L EC50

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Tetrahydrofuran 109-99-9	0.45
Dichloromethane 75-09-2	1.25

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

US EPA Waste Number

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Tetrahydrofuran 109-99-9				U213
Dichloromethane 75-09-2	U080	Included in waste streams: F001, F002, F024, F025, F039, K009, K010, K156, K157, K158		U080

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Dichloromethane 75-09-2	Category I - Volatiles		Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Tetrahydrofuran 109-99-9	Toxic Ignitable
Dichloromethane 75-09-2	Toxic

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No UN1992
Proper Shipping Name Flammable liquid, toxic, n.o.s. (Tetrahydrofuran, Dichloromethane)
Hazard Class 3
Subsidiary Hazard Class 6.1
Packing Group II
Reportable Quantity (RQ) 1000 lbs for Dichloromethane and Tetrahydrofuran

IATA

UN/ID No UN1992
Proper Shipping Name Flammable liquid, toxic, n.o.s. (Tetrahydrofuran, Dichloromethane)
Hazard Class 3
Subsidiary Hazard Class 6.1
Packing Group II

IMDG

UN/ID No UN1992
Proper Shipping Name Flammable liquid, toxic, n.o.s. (Tetrahydrofuran, Dichloromethane)
Hazard Class 3
Subsidiary Hazard Class 6.1
Packing Group II

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Tetrahydrofuran	Present	X		Present		Present	X	Present	X	X
Dichloromethane	Present	X		Present		Present	X	Present	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Tetrahydrofuran 109-99-9	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
Dichloromethane 75-09-2	1000 lb 1 lb		RQ 1000 lb final RQ RQ 454 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ

SARA 311/312 Hazard Categories

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

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

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Dichloromethane - 75-09-2	75-09-2	40-60	0.1

CWA (Clean Water Act)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Dichloromethane		X	X	

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Dichloromethane - 75-09-2	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Tetrahydrofuran 109-99-9	X	X	X
Dichloromethane 75-09-2	X	X	X

16. OTHER INFORMATION

NFPA	Health Hazards	Flammability	Instability	Special Hazards
	2	1	0	Not determined
HMIS	Health Hazards	Flammability	Physical Hazards	Personal Protection
	2	1	0	Not determined

Issue Date: 15-May-2012
Revision Date: 03-Dec-2014
Revision Note: New format

Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet