



Safety Data Sheet

SC-201

Issue Date: May, 2012

Revision Date: May, 2019

Version: 2

1. IDENTIFICATION

Product Identifier

Product Name SC 201

Other means of identification

SDS # CIP-010

UN/ID No UN2056

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 Ethereal

Classification

Acute toxicity - Oral	Category 4
Serious eye damage/eye irritation	Category 2
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable Liquids	Category 2

Signal Word

Danger

Hazard Statements

H302: Harmful if swallowed

H315: Causes skin irritation

H319: Causes serious eye irritation

H351: Suspected of causing cancer

H335: May cause respiratory irritation.

H336: May cause drowsiness or dizziness

H225: Highly flammable liquid and vapor



Precautionary Statements - Prevention

P201: Obtain special instructions before use
P202: Do not handle until all safety precautions have been read and understood
P210: Keep away from heat/sparks/open flames/hot surfaces. — No smoking
P233: Keep container tightly closed
P235: Keep cool
P240: Ground/bond container and receiving equipment
P241: Use explosion-proof equipment
P242: Use only non-sparking tools
P243: Take precautionary measures against static discharge
P261: Avoid breathing dust/fume/gas/mist/vapors/spray
P264: Wash face, hands and any exposed skin thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P271: Use only outdoors or in a well-ventilated area
P280: Wear protective gloves/protective clothing/eye protection/face protection
P281: Use personal protective equipment as required

Precautionary Statements - Response

P308: If exposed or concerned: Get medical advice/attention
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313: If eye irritation persists: Get medical advice/attention.
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P333+P313: If skin irritation or rash occurs: Get medical advice/attention
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P310+P330+P331: Do not induce vomiting
 Rinse mouth
P370+P378: IN CASE OF FIRE: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

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

Precautionary Statements - Disposal

P501: Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Tetrahydrofuran	109-99-9	90-100

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 irritation develops or persists seek medical attention.
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.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Foam, Dry chemical, Carbon dioxide (CO₂).

Unsuitable Extinguishing Media Water jet.

Specific Hazards Arising from the Chemical

Vapors may travel to source of ignition and flash back. Highly flammable liquid and vapor. May form explosive peroxides.

Hazardous Combustion Products Toxic fumes may be released. Forms peroxides of unknown stability.

Sensitivity to Static Discharge Take precautionary measures against static discharge. Flammable mixtures of this product are readily ignited even by 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. Do not eat, drink or smoke when handling this product. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Take precautionary measures against static discharges. Ground container and transfer equipment to eliminate static electric sparks. Use spark-proof tools and explosion-proof equipment. Avoid breathing vapors or mists. Contaminated work clothing should not be allowed out of the workplace. Use only in well-ventilated areas. Keep containers closed when not in use. Keep cool.
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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	Lithium aluminum hydride, strong oxidizers and potassium hydroxide. Will attack some forms of plastics, rubbers and coatings. Strong oxidizing agents.

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

Appropriate engineering controls

Engineering Controls	Good ventilation is required. Maintain eye wash fountain and quick-drench facilities in work area.
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Individual protection measures, such as personal protective equipment

Eye/Face Protection	Splash goggles or safety glasses.
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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	Etheral
Appearance	Clear colorless liquid	Odor Threshold	Not determined
Color	Clear Colorless		
Property	Values	Remarks • Method	
pH	7.0		
Melting Point/Freezing Point	-108.5 °C / -162 °F		
Boiling Point/Boiling Range	66 °C / 151 °F		
Flash Point	-14 °C / 6.8 °F		
Evaporation Rate	8.0	(butyl acetate = 1)	
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	@ 20°C (68°F)	
Water Solubility	Miscible in water		
Solubility in other solvents	Not determined		
Partition Coefficient	Not determined		
Auto-ignition Temperature	321 °C / 610 °F		
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	Hazardous polymerization may occur.
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Conditions to Avoid

Heat, flames and sparks.

Incompatible Materials

Lithium aluminum hydride, strong oxidizers and potassium hydroxide. Will attack some forms of plastics, rubbers and coatings. Strong oxidizing agents.

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	Irritating to skin.
Inhalation	May cause irritation to the mucous membranes and upper respiratory tract.
Ingestion	Ingestion may cause irritation to mucous membranes. Harmful if swallowed.

Component Information**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 Suspected of causing cancer.

Chemical Name	ACGIH	IARC	NTP	OSHA
Tetrahydrofuran 109-99-9	A3			

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

STOT - single exposure May cause respiratory irritation. May cause drowsiness or dizziness.**Numerical measures of toxicity****Product Information**

Oral LD50 1650 mg/kg (rat)

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		

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Tetrahydrofuran 109-99-9	0.45

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

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Tetrahydrofuran 109-99-9	Toxic Ignitable

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	UN2056
Proper Shipping Name	Tetrahydrofuran
Hazard Class	3
Packing Group	II
Reportable Quantity (RQ)	1000 lbs

IATA

UN/ID No	UN2056
Proper Shipping Name	Tetrahydrofuran
Hazard Class	3
Packing Group	II

IMDG

UN/ID No	UN2056
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Proper Shipping Name	Tetrahydrofuran
Hazard Class	3
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

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

SARA 311/312 Hazard Categories

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

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Tetrahydrofuran 109-99-9	X	X	X

16. OTHER INFORMATION

NFPA	Health Hazards	Flammability	Instability	Special Hazards
	2	3	2	Not determined
HMIS	Health Hazards	Flammability	Physical Hazards	Personal Protection
	2	3	2	Not determined

Issue Date: 15-May-2012
Revision Date: November, 2019
Revision Note: Added GHS codes

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