spectrum[®]



SAFETY DATA SHEET

Preparation Date: 11/18/2016

Revision Date: Not Applicable

Revision Number: Not Applicable

1. IDENTIFICATION

Product identifier

Product code: Product Name: C1671 6-Chloro-2-hexanone

Other means of identification Synonyms: CAS #: **RTECS #** CI#:

No information available 10226-30-9 Not available Not available

Recommended use of the chem	ical and restrictions on use
Recommended use:	For manufacturing or laboratory use only.
Uses advised against	Not for food or drug use.
Supplier:	Spectrum Chemical Mfg. Corp 14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000.
Order Online At:	https://www.spectrumchemical.com
Emergency telephone number	Chemtrec 1-800-424-9300
Contact Person:	Martin LaBenz (West Coast)
Contact Person:	Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Flammable liquids

Category 4

Label elements

Warning

Combustible liquid

Hazards not otherwise classified (HNOC) Not Applicable

Other hazards Not available

Precautionary Statements - Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IN CASE OF FIRE: Use dry chemical, water spray, alcohol-resistant foam or CO2 to extinguish.

Precautionary Statements - Storage Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
6-Chloro-2-hexanone	10226-30-9	100

4. FIRST AID MEASURES		
First aid measures		
General Advice:		n Center in the United States can provide assistance if you ncy and need to talk to a poison specialist. Call
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention if irritation develops. Consult a physician if necessary.	
Eye Contact:	Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.	
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.	
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.	
Most important symptoms and effects, both acute and delayed		
Symptoms	May cause eye/skin irritation.	
Indication of any immediate medica	al attention and special tre	eatment needed
Notes to Physician:	Treat symptomatically.	
Protection of first-aiders First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.		
	5. FIRE-FIGHT	ING MEASURES
Extinguishing Media Suitable Extinguishing Media:		Dry chemical. Carbon dioxide (CO2). Water spray, mist, or foam.
Unsuitable Extinguishing Media		Do not use a solid (straight) water stream as it may scatter and spread fire.
Specific hazards arising from the chemical		

Hazardous Combustion Products:	Carbon Oxides. Hydrogen Chloride Gas. Halogenated Compounds.
Specific hazards:	Combustible material May be ignited by heat, sparks or flames Container explosion may occur under fire conditions or when heated Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks)
Special Protective Actions for Firefighters	
Specific Methods:	For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out. Dike fire-control water for later disposal; do not scatter the material.
Special Protective Equipment 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:	Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protective equipment. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded. Remove all sources of ignition. Take precautionary measures against static discharges.	
Environmental precautions	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.	
Methods and material for containment and cleaning up		
Methods for containment	Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth), then place in a suitable chemical waste container. In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.	
Methods for cleaning up	Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Use only non-sparking tools. Clean contaminated surface thoroughly.	
7. HANDLING AND STORAGE		

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. All equipment used when handling the product must be grounded. Remove all sources of ignition. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist. Keep away from sources of ignition - no smoking. Use only in well-ventilated areas. Do not ingest. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep refrigerated. Keep at temperatures between 2 and 8 °C. Heat sensitive. Keep away from heat and sources of ignition. Air sensitive. Store under inert gas. Packed under Argon. Store away from incompatible materials. Store in a segregated and approved area.

Incompatible Materials:

Strong oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WHEEL
6-Chloro-2-hexanone	10226-30-9	None	None	None	None

Canada

	Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
6-C	hloro-2-hexanone	10226-30-9	None	None	None	None

Australia and Mexico

Components	CAS-No.	Australia	Mexico
6-Chloro-2-hexanone	10226-30-9	None	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation, especially in confined areas. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection:	Goggles
Skin and body protection:	Gloves. Long sleeved clothing. Chemical resistant apron.
Respiratory protection:	Vapor respirator. Be sure to use an approved/certified respirator or equivalent.
Hygiene measures:	Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical	state:
Liquid	

Appearance: Clear.

Color: Colorless to pale yellow.

Odor: No information available. **Taste** No information available. Formula: C6H11Cl0 Molecular/Formula weight: 134.60

Flash Point Tested according to: Closed cup

Upper Explosion Limit (%): No information available

Boiling point/range(°C/°F): 86°C (187°F)

Specific gravity: No information available

Evaporation rate: No information available

Odor threshold (ppm): No information available

Miscibility: No information available Flammability: Combustible

Autoignition Temperature (°C/°F): No information available

Melting point/range(°C/°F): No information available

Bulk density: No information available

pH: No information available

Vapor density: No information available

Partition coefficient (n-octanol/water): No information available

Solubility: No information available Flashpoint (°C/°F): 91°C (196°F)

Lower Explosion Limit (%): No information available

Decomposition temperature(°C/°F): No information available

Density (g/cm3): 1.03

Vapor pressure @ 20°C (kPa): No information available

VOC content (g/L): No information available

Viscosity: No information available

10. STABILITY AND REACTIVITY

Reactivity Reactive with oxidizing agents

Chemical stability	
Stability:	Sensitive to air. Heat sensitive. Stable under recommended storage conditions.
Possibility of Hazardous Reactions	E: Hazardous polymerization does not occur
Conditions to avoid:	Exposure to air. Moisture sensitive. Heat. Ignition sources. Incompatible materials.
Incompatible Materials:	Strong oxidizing agents
Hazardous decomposition products:	Carbon oxides. Hydrogen chloride gas. Halogenated compounds.
<u>Other Information</u> Corrosivity:	No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure: Eyes. Ingestion. Inhalation.

Acute Toxicity

Component Information

6-Chloro-2-hexanone

CAS-No. 10226-30-9 LD50/oral/rat = No information available **LD50/oral/mouse** = No information available **LD50/dermal/rabbit** = No information available LD50/dermal/rat = No information available LC50/inhalation/rat = No information available LC50/inhalation/mouse = No infomation available Other LD50 or LC50information = No information available **Product Information** LD50/oral/rat = VALUE- Acute Tox Oral = No information available LD50/oral/mouse = Value - Acute Tox Oral = No information available LD50/dermal/rabbit VALUE-Acute Tox Dermal = No information available LD50/dermal/rat VALUE -Acute Tox Dermal = No information available LC50/inhalation/rat VALUE-Vapor = No information available VALUE-Gas = No information available VALUE-Dust/Mist = No information available LC50/Inhalation/mouse **VALUE-Vapor** = No information available VALUE - Gas = No information available VALUE - Dust/Mist = No information available Symptoms Skin Contact: May cause skin irritation. May cause eye irritation. Eye Contact: Inhalation May cause irritation of respiratory tract. May cause digestive (gastointestinal) tract irritation. Ingestion Aspiration hazard No information available. Delayed and immediate effects as well as chronic effects from short and long-term exposure **Chronic Toxicity** No information available. No information available. Sensitization: No information available **Mutagenic Effects:** Carcinogenic effects: Not considered carcinogenic.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable	Australia - Prohibited
					-	Carcinogenic	Carcinogenic

6-Chloro-2-bexanone 10226-30-9 Not listed Not listed Not listed Not listed Not listed Not listed							Substances	Substances
	6-Chloro-2-hexanone	10226-30-9	Not listed					

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

No data is available
No information available No information available No information available

Specific Target Organ Toxicity

STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Target Organs:	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity	
Ecotoxicity effects:	No data available.
Persistence and degradability:	No information available

Bioaccumulative potential:	No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
6-Chloro-2-hexanone	10226-30-9	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Subsidiary Class	No information available
Packing group:	No information available
Emergency Response Guide	No information available

Number Marine Pollutant DOT RQ (lbs): **Special Provisions** Symbol(s): **Description:**

TDG (Canada)

UN-No: **Proper Shipping Name: Hazard Class:** Subsidiary Risk: Packing Group: Marine Pollutant **Description:**

ADR

UN-No: **Proper Shipping Name:** Hazard Class: Packing Group: Subsidiary Risk:

IMO / IMDG

UN-No:
Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
Marine Pollutant

RID

UN-No: **Proper Shipping Name:** Hazard Class: Subsidiary Risk: Packing Group:

ICAO

UN-No: **Proper Shipping Name:** Hazard Class: Subsidiary Risk: Packing Group:

ΙΑΤΑ

UN-No: **Proper Shipping Name: Hazard Class:** Subsidiary Risk: Packing Group: ERG Code: **Special Provisions**

No data available No information available No Information available No information available No information available

Not Regulated No information available No information available

Not Regulated No information available No information available No information available No information available

Not Regulated No information available No information available No information available No information available No information available

Not Regulated No information available No information available No information available No information available

Not Regulated No information available No information available No information available No information available

Not Regulated No information available No information available

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines	Japan ENCS	CHINA	Australia	EINECS-No.	1

				(PICCS)			(AICS)	
6-Chloro-2-hexanone	10226-30-9	Not Listed	Not present	Not present	Not present	Not present	Present	Present 233-546-5

U.S. Regulations

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

<u>Chemicals Known to the State of California to Cause Reproductive Toxicity:</u> This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male	Female
		_		Reproductive	Reproductive
				Toxicity	Toxicity:
6-Chloro-2-hexanone	10226-30-9	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components C/	AS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
6-Chloro-2-hexanon 10	0226-30-9	None	None	None	None	None
e						

U.S. TSCA

Components		TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
6-Chloro-2-hexanone	10226-30-9	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

B3 Combustible liquid

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

6 Chlora 2 havanana 10226 20 0 Not Listad Not Listad	Canada (DSL) Canada (NDSL)	CAS-No.	Components
	0-9 Not Listed Not Listed	10226-30-9	6-Chloro-2-hexanone

Components	CAS-No.	CEPA Schedule I - Toxic Substances
6-Chloro-2-hexanone	10226-30-9	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject
		to Mandatory Reporting
6-Chloro-2-hexanone	10226-30-9	Not listed

EU Classification R-phrase(s)

not determined (not applicable)

S -phrase(s)

none

Components	CAS-No.		Concentration Limits:	Safety Phrases
6-Chloro-2-hexanone	10226-30-9		No information	
The preduct is clease	iad in accordance with	Anney VI to Directive		

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger: None.

16. OTHER INFORMATION

Preparation Date:	11/18/2016
Revision Date:	Not Applicable
Prepared by:	Roumann Pangilinan
Disclaimer:	All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet