

# 2-Cyclohexen-1-one, 3-methyl-6-(1-

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 06/10/2015 Version: 1.0

SECTION 1: Identification			
1.1. Identification			
Product form	: Substance		
Substance name	: 2-Cyclohexen-1-one, 3-methyl-6-(1-methylethyl)-, (S)-		
CAS-No.	: 6091-50-5		
Product code	: (US) W1626		
Formula	: C10H16O		
Synonyms	: D-Piperitone / .gammaPiperitone / .deltaPiperitone / 2-Cyclohexen-1-one, 3-methyl-6-(1-methylethyl)-, (6S)- / p-Menth-1-en-3-one / d-Piperitone		

#### 1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Synerzine 5340 Hwy 42 S Ellenwood, Georgia 30294 - USA T 404-524-6744 - F 404-577-1651 info@synerzine.com - www.synerzine.com

#### 1.4. Emergency telephone number

Emergency number

: Infotrac 1-800-535-5053 (Contract# 102471) Dial +1-352-323-3500 when outside the US

SECTION 2: Hazard(s	;) identificati	ion
2.1. Classification of		
<b>GHS-US classification</b>		
Flammable liquids Category 4	H227	Combustible liquid
Acute toxicity (oral) Category 4	H302	Harmful if swallowed
Full text of H statements : see	section 16	
2.2. GHS Label eleme	ents, including	precautionary statements
GHS-US labeling		
Signal word (GHS-US)		: Warning
Hazard statements (GHS-US)		: H227 - Combustible liquid H302 - Harmful if swallowed
Precautionary statements (GH	IS-US)	<ul> <li>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. heat, hot surfaces, open flames, sparks</li> <li>P264 - Wash hands, forearms and face thoroughly after handling.</li> <li>P270 - Do not eat, drink or smoke when using this product.</li> <li>P280 - Wear eye protection, face protection, protective clothing, protective gloves.</li> <li>P301+P312 - If swallowed: Call a doctor, a POISON CENTER if you feel unwell</li> <li>P330 - Rinse mouth.</li> <li>P370+P378 - In case of fire: Use alcohol resistant foam, dry sand to extinguish.</li> <li>P403+P235 - Store in a well-ventilated place. Keep cool.</li> <li>P501 - Dispose of contents/container to an approved waste disposal plant</li> </ul>
2.3. Other hazards w	vhich do not re	sult in classification
No additional information ava	ilable	

#### 2.4. Unknown acute toxicity (GHS US) Not applicable 06/22/2018 EN (English US) Page 1

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

.1. Substances				
Name		Product identifier	%	GHS-US classification
2-Cyclohexen-1-one, 3-methyl-6-(1-methylethyl)-, (Main constituent)	(S)-	(CAS-No.) 6091-50-5	99 - 100	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302
Full text of hazard classes and H-statements : s	see section 16			
3.2. Mixtures				
Not applicable				
SECTION 4: First-aid measures				
4.1. Description of first aid meas	ures			
First-aid measures general	: Call a poison center/doc	tor/physician if you feel unw	vell.	
First-aid measures after inhalation	: Remove person to fresh	air and keep comfortable for	breathing.	
First-aid measures after skin contact	: Wash skin with plenty o	f water.		
First-aid measures after eye contact	: Rinse eyes with water as	s a precaution.		
First-aid measures after ingestion	: Rinse mouth. Call a poise	on center/doctor/physician i	f you feel un	well.
4.2. Most important symptoms ar	nd effects (acute and dela	yed)		
No additional information available				
4.3. Immediate medical attention	and special treatment if	necessary		
Treat symptomatically.				
SECTION 5: Fire-fighting measu				
5.1. Suitable (and unsuitable) ext				
Suitable extinguishing media	: Water spray. Dry powde	er. Foam. Carbon dioxide.		
5.2. Specific hazards arising from	the chemical			
Fire hazard	: Combustible liquid.			
Reactivity	: The product is non-reac	tive under normal conditions	of use, stora	age and transport.
5.3. Special protective equipmen	t and precautions for fire-	fighters		
Protection during firefighting		ction without suitable protec	ctive equipm	ent. Self-contained breathing
SECTION 6: Accidental release	measures			
6.1. Personal precautions, protec	tive equipment and emerg	gency procedures		
6.1.1. For non-emergency personnel				
Emergency procedures	: Ventilate spillage area. N	lo open flames, no sparks, an	d no smokin	g.
6.1.2. For emergency responders Protective equipment		ction without suitable protec controls/personal protection		ent. For further information refe
6.2. Environmental precautions				
Avoid release to the environment.				
6.3. Methods and material for co	ntainmen <u>t and cleaning u</u>	ρ		
Methods for cleaning up			uthorities if p	product enters sewers or public
<u> </u>	waters.	<b>y</b>	I	
Other information	: Dispose of materials or s	solid residues at an authorize	d site.	
5.4. Reference to other sections				
For further information refer to section 13.				
SECTION 7: Handling and storag				
7.1. Precautions for safe handling		of the superior of the TZ	C 1	hat and a constant
Precautions for safe handling	: Ensure good ventilation	of the work station. Keep aw n sources. No smoking. Wear	ay from heat	

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Hygiene measures

: Do not eat, drink or smoke when using this product. Always wash hands after handling the product

product. 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Store in a well-ventilated place. Keep cool.

### SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

#### 8.2. Appropriate engineering controls

Appropriate engineering controls Environmental exposure controls Ensure good ventilation of the work station.Avoid release to the environment.

#### 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

Protective gloves

#### Eye protection:

Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### **Respiratory protection:**

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemic	al properties
9.1. Information on basic physical	and chemical properties
Physical state	: Liquid
Appearance	: A clear, colorless liquid.
Color	: colorless
Odor	: camphor-like odor; sharp, minty.
Odor threshold	: No data available
рН	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: 233 - 235 °C
Flash point	: 195 °F closed cup
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: 0.934 - 0.935 g/ml
Molecular mass	: 152.23 g/mol
Solubility	: insoluble in water. soluble in alcohols.
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
9.2. Other information	
No additional information available	
SECTION 10: Stability and reactiv	ity
10.1. Reactivity	
The product is non-reactive under normal conditi	ions of use, storage and transport.
10.2. Chemical stability	
Stable under normal conditions.	
10.3. Possibility of hazardous reaction	ons
No dangerous reactions known under normal con	ditions of use.
10.4. Conditions to avoid	
Avoid contact with hot surfaces. Heat. No flames,	no sparks. Eliminate all sources of ignition.
10.5. Incompatible materials	
No additional information available	
10.6. Hazardous decomposition prod	ucts
Under normal conditions of storage and use, haza	rdous decomposition products should not be produced.
SECTION 11: Toxicological inform	ation
SECTION II. TOXICOTOGICAL INTOLIN	
11.1. Information on toxicological ef	
11.1. Information on toxicological ef	fects : Not classified
11.1. Information on toxicological ef Acute toxicity	fects : Not classified
11.1.       Information on toxicological ef         Acute toxicity         2-Cyclohexen-1-one, 3-methyl-6-(1-methylet         ATE US (oral)	fects : Not classified thyl)-, (S)- (6091-50-5)
11.1. Information on toxicological ef         Acute toxicity         2-Cyclohexen-1-one, 3-methyl-6-(1-methylet         ATE US (oral)         Skin corrosion/irritation         Serious eye damage/irritation	fects         : Not classified         thyl)-, (S)- (6091-50-5)         500 mg/kg body weight         : Not classified         : Not classified
11.1. Information on toxicological ef         Acute toxicity         2-Cyclohexen-1-one, 3-methyl-6-(1-methylet         ATE US (oral)         Skin corrosion/irritation         Serious eye damage/irritation         Respiratory or skin sensitization	fects         : Not classified         thyl)-, (S)- (6091-50-5)         500 mg/kg body weight         : Not classified         : Not classified         : Not classified         : Not classified
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11.1.       Information on toxicological ef         Acute toxicity         2-Cyclohexen-1-one, 3-methyl-6-(1-methylet)	fects         : Not classified         thyl)-, (S)- (6091-50-5)         500 mg/kg body weight         : Not classified         : Not classified

Ecology - general

: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

12.2.	Persistence and degradability
No addi	onal information available
12.3.	Bioaccumulative potential
NU auu	
12.4.	Mobility in soil
	Mobility in soil onal information available

No additional information available

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 13: Disposal consideration	ons
13.1. Disposal methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
SECTION 14: Transport informatio	n
Department of Transportation (DOT)	
In accordance with DOT	
Transport document description	: NA1993 Combustible liquid, n.o.s., 3, III
UN-No.(DOT)	: NA1993
Proper Shipping Name (DOT)	: Combustible liquid, n.o.s.
Class (DOT)	: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Packing group (DOT)	: III - Minor Danger
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 241
DOT Symbols	: D - Proper shipping name for domestic use only, or to and from Canada,G - Identifies PSN requiring a technical name
DOT Special Provisions (49 CFR 172.102)	<ul> <li>IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HD2, and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).</li> <li>T1 - 1.5 178.274(d)(2) Normal 178.275(d)(2)</li> <li>T4 - 2.65 178.274(d)(2) Normal 178.275(d)(3)</li> <li>TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.</li> </ul>
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 220 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
Other information	: No supplementary information available.
Transportation of Dangerous Goods	

Transport by sea

Air transport

CTION 15: Regulatory information
1. US Federal regulations
additional information available
2. International regulations
NADA
Cyclohexen-1-one, 3-methyl-6-(1-methylethyl)-, (S)- (6091-50-5)
sted on the Canadian DSL (Domestic Substances List)
Regulations
additional information available
ional regulations

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2-Cyclohexen-1-one, 3-methyl-6-(1-methylethyl)-, (S)- (6091-50-5)	
Listed on the AICS (Australian Inventory of Chemical Substances)	
Listed on NZIoC (New Zealand Inventory of Chemicals)	
Listed on the TCSI (Taiwan Chemical Substance Inventory)	

### 15.3. US State regulations

No additional information available

### SECTION 16: Other information

#### Full text of H-phrases:

H227	Combustible liquid
H302	Harmful if swallowed
NFPA health hazard	: 1 - Materials that, under emergency conditions, can cause significant irritation.
NFPA fire hazard	: 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.
Hazard Rating	
Health	: 1 Slight Hazard - Irritation or minor reversible injury possible
Flammability	: 2 Moderate Hazard - Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100 F bu below 200 F. (Classes II & IIIA)
Physical	: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NC react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
Personal protection	: B
	B - Safety glasses, Gloves

#### Synerzine US

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product