

Revision: 08/29/2013 Supersedes Revision: 05/23/2013

according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 1272/2008

## Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

- 1.1
   Product Code:
   C99 & C100

   Product Name:
   Starting Fluid
- **1.2** Relevant identified uses of the substance or mixture and uses advised against:

## 1.3 Details of the Supplier of the Safety Data Sheet:

	Company Name:	CYCLO INDUSTRIES, INC. 902 SOUTH US HIGHWAY 1 JUPITER, FL 33477	Phone Number: (800)843-7813
	Web site address:	www.cyclo.com	(24.0).000 04.04
1.4	Information: Emergency telephone no	First Aid Emergency (Outside U.S.)	(312)906-6194

# Emergency Contact: First Aid Emergency (800)752-7869 CHEMTREC (703) 527-3887 (800)424-9300

# Section 2. Hazards Identification

## 2.1 Classification of the Substance or Mixture:

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]:

Flammable Gases, Category 1

Gas Under Pressure, Compressed gas

Flammable Liquids, Category 1

Acute Toxicity: Oral, Category 4

Skin Corrosion/Irritation, Category 2

Carcinogenicity, Category 1B

Target Organ Systemic Toxicity (single exposure), Category 3

Aspiration Toxicity, Category 1

Aquatic Toxicity (Acute), Category 1

Aquatic Toxicity (Chronic), Category 1

- 2.2 Label Elements:
- 2.2.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]:



GHS Signal Word:

Danger

## GHS Hazard Phrases:

H220: Extremely flammable gas.

H280: Contains gas under pressure; may explode if heated.

H224: Extremely flammable liquid and vapor.

H302: Harmful if swallowed.

H315: Causes skin irritation.

H336: May cause drowsiness or dizziness.

H350: May cause cancer.

H335: May cause respiratory irritation.

H304: May be fatal if swallowed and enters airways.

H410: Very toxic to aquatic life with long lasting effects.

## **GHS Precaution Phrases:**

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P233: Keep container tightly closed.

P280: Wear protective gloves/clothing and eye/face protection.



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P240: Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting equipment.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P273: Avoid release to the environment.

#### **GHS Response Phrases:**

P377: Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

P381: Eliminate all ignition sources if safe to do so.

P370+378: In case of fire, use dry chemical, CO2 or alcohol foam for extinction.

P303+361+353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330: Rinse mouth.

P302+352: IF ON SKIN: Wash with plenty of soap and water.

P309+311: Call a POISON CENTER or doctor/physician if exposed or you feel unwell.

P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P331: Do NOT induce vomiting.

#### **GHS Storage and Disposal Phrases:**

P410+403: Protect from sunlight and store in well-ventilated place.

P403+235: Store in cool/well-ventilated place.

P501: Dispose of contents/container in accordance with local/regional/national/international regulation.

#### Hazard Rating System:



#### 2.3 Adverse Human Health Effects and Symptoms:

	Section 3. Composition/Information on Ingredients					
CAS #	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification		
142-82-5	Heptane	50.0 -60.0 %	205-563-8 601-008-00-2	Flam. Liq. 2: H225 Asp. Toxic. 1: H304 Skin Corr. 2: H315 TOST (SE) 3: H335 H336 Aquatic (A) 1: H400 Aquatic (C) 1: H410		
60-29-7	Ethane, 1,1'-Oxybis-	30.0 -40.0 %	200-467-2 603-022-00-4	Flam. Liq. 1: H224 Acute Tox.(O) 4: H302 TOST (SE) 3: H335 H336		
124-38-9	Carbon dioxide	5.0 -10.0 %	204-696-9 NA	No data available.		



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		Section 4. First Aid Measures
4.1	Description of First Aid Measures:	dlf swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head lower than hips to prevent aspiration. If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. In case of eye contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes. Do not permit victim to rub eyes. In case of skin contact, wash with soap and water for 15 minutes. If irritation persists or signs of toxicity occur, seek medical attention. Remove contaminated clothing and shoes, and launder before reuse. Call physician immediately if adverse reaction occurs.
		Section 5. Fire Fighting Measures
5.1	Media:	J Dry chemical. Carbon dioxide. Alcohol foam. Use water spray to keep containers cool that are exposed to heat or flames.
5.2	Flammable Properties and Hazards:	
	Flammability Classification:	NFPA Level 3 Aerosol
	Flash Pt:	< -10.00 F (-23.3 C) Method Used: TAG Closed Cup
	Explosive Limits:	LEL: 1.2 UEL: 6.7
	Autoignition Pt:	365.00 F (185.0 C)
5.3	Fire Fighting Instructions:	Wear approved positive-pressure self-contained breathing apparatus and protective clothing. Vapor may cause flash fire. Fight from a maximum distance or use unmanned hose holders or monitor nozzles. Containers can build up pressure if exposed to heat; cool with flooding quantities of water until well after the fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of vessel.
		Section 6. Accidental Release Measures
6.3	Methods and Material For Containment and Cleaning Up:	Wear appropriate protective clothing and equipment to prevent skin and eye contact. Contain any liquid from leaking containers. Avoid all sources of ignition; heat, sparks and open flames. Do not puncture or incinerate container. Contents under pressure. Leaking containers should be removed to an isolated, well-ventilated area and transferred to other suitable containers. Wipe, scrape or soak up in an inert material and put in a container intended for flammable materials disposal. Do not allow to enter sanitary drains, sewer or surface and subsurface waters. Keep out of lakes, ponds or streams.
		Section 7. Handling and Storage
7.1	Precautions To Be Taken in Handling:	Caution: Contents under pressure. Keep away from heat and open flame. Use only in a well ventilated area. Avoid breathing vapors, if exposed to high vapor concentration, leave area at once. Avoid contact with skin and eyes. Keep out of the reach of children.
7.2	Precautions To Be Taken in Storing:	Do not puncture, incinerate or store above 120 degrees F. Exospore to high temperatures may cause bursting. Do not store in the passenger compartment of an automobile. Store in a cool, dry place, out of direct sunlight.
	Secti	on 8. Exposure Controls/Personal Protection
8.1	Exposure Parameters:	

8.1 Exposure Parameters:

CAS #	Partial Chemical Name	Britain EH40	France VL	Europe
142-82-5	Heptane	TWA: 2085 mg/m3 (500 ppm)	TWA: 1668 mg/m3 (400	TWA: 2085. mg/m3
		STEL: ()	ppm)	

STEL: 2085 mg/m3 (500

ppm)



		Starting Fluid		vision: 08/29/2013 vision: 05/23/2013
60-29-7	Ethane, 1,1'-Oxybis-	TWA: 310 mg/m3 (100 ppm) STEL: 620 mg/m3 (200 ppm)	TWA: 308 mg/m3 (100 ppm) STEL: 616 mg/m3 (200 ppm)	TWA: 308 mg/m3 STEL: 616 mg/m3
124-38-9	Carbon dioxide	TWA: 9150 mg/m3 (5000 ppm) STEL: 27400 mg/m3 (15000 ppm)	TWA: 9000 mg/m3 (5000 ppm)	TWA: 9000 mg/m3
CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
142-82-5	Heptane	PEL: 500 ppm	TLV: 400 ppm	No data.
60-29-7	Ethane, 1,1'-Oxybis-	PEL: 400 ppm	TLV: 400 ppm STEL: 500 ppm	No data.
124-38-9	Carbon dioxide	PEL: 5000 ppm	TLV: 5000 ppm STEL: 30,000 ppm	No data.

#### 8.2 Exposure Controls:

8.2.1 Engineering Controls Use in a well ventilated area. Local exhaust ventilation as necessary to maintain exposures to within applicable limits.

#### 8.2.2 Personal protection equipment:

Eye Protection:	Chemical goggles; also wear a face shield if splashing hazard exists.			
Protective Gloves:	Wear protective clothing and gloves.			
Other Protective	Wear protective clothing and gloves.			
Clothing:				
Respiratory Equipment No data available.				
(Cmaaifer Tema)				

(Specify Type):

# **Section 9. Physical and Chemical Properties**

### 9.1 Information on Basic Physical and Chemical Properties

Physical States:	[]Gas [X]Liqu	id [] Solid
Appearance and Odor:	Colorless to pale yell	ow liquid. Pungent sweet odor.
Melting Point:	No data.	
Boiling Point:	No data.	
Flash Pt:	< -10.00 F (-23.3 C)	Method Used: TAG Closed Cup
Evaporation Rate:	NE	
Explosive Limits:	LEL: 1.2	UEL: 6.7
Vapor Pressure (vs. Air or mm Hg):	NE	
Vapor Density (vs. Air = 1):	NE	
Specific Gravity (Water = 1):	No data.	
Density:	5.71 LB/GA	
Solubility in Water:	Partially	
Autoignition Pt:	365.00 F (185.0 C)	
Viscosity:	NE	



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## 9.2 Other Information

9.2	Other Information	
	Percent Volatile:	93.3 %
		Section 10. Stability and Reactivity
10.1	Reactivity:	No data available.
10.2	Stability:	Unstable [ ] Stable [ X ]
10.3	Conditions To Avoid -	No data available.
	Hazardous Reactions:	
	Possibility of	Will occur [ ] Will not occur [ X ]
	Hazardous Reactions:	
10.4		Keep away from heat, sparks and flame. Avoid any source of ignitron. Do not expose to
	Instability:	heat or store at temperatures above 120 degrees F.
10.5	Incompatibility -	Contact with oxidizing agents. Concentrated oxygen. Nitric acid. Avoid contact with
	Materials To Avoid:	chlorine in the presence of light.
10.6	Hazardous	Carbon monoxide and other asphxiants. Explosive peroxides. Will react with nitric acid to
	Decomposition Or Byproducts:	form explosive nitrates.
	Byproducts.	Section 11 Texicological Information
		Section 11. Toxicological Information
11.1	Information on Toxicological Effects:	No data available.
	Toxicological Effects.	CAS# 142-82-5:
		Other Studies:, TDLo, Oral, Rat, 60.00 GM/KG, 3 W.
		Results:
		Kidney, Ureter, Bladder: Changes in liver weight.
		- National Technical Information Service, Vol/p/yr: OTS0571116,
		Other Studies:, TDLo, Oral, Rat, 260.0 GM/KG, 13 W.
		Results:
		Kidney, Ureter, Bladder: Changes in bladder weight.
		Endocrine:Hypoglycemia.
		Nutritional and Gross Metabolic:Weight loss or decreased weight gain. - National Technical Information Service, Vol/p/yr: OTS0571116,
		Other Studies:, TCLo, Inhalation, Rat, 4000. PPM, 6 D. Results:
		Brain and Coverings: Recordings from specific areas of CNS.
		Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Ear: Changes in
		cochlear structure or function.
		Nutritional and Gross Metabolic:Weight loss or decreased weight gain.
		- Pharmacology and Toxicology, Munksgaard International Pub., POB 2148, Copenhagen K Denmark, Vol/p/yr: 76,41, 1995
		Other Studies:, TDLo, Intraperitoneal, Rat, 9625. MG/KG, 7 D.
		Results:
		Liver: Other changes.
		Blood:Changes in serum composition (e.g.
		Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels: Multiple
		enzyme effects.
		- Toxicology Letters., Elsevier Science Pub. B.V., POB 211, 1000 AE, Amsterdam 1000 AE Netherlands, Vol/p/yr: 14,169, 1982
		A Homonundo, vompryn 17,100, 1002



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Other Studies:, TDLo, Intraperitoneal, Rat, 8840. MG/KG, 45 D. Results: Liver: Other changes. Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels: Phosphatases. Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels: Hepatic microsomal mixed oxidase (dealkylation, hydroxylation, etc.) - JAT, Journal of Applied Toxicology., John Wiley & Sons Ltd., Baffins Lane, Chichester, W.Sussex PO19 1UD UK, Vol/p/yr: 8,81, 1988 Acute toxicity, TCLo, Inhalation, Human, 1000. PPM, 6 M. Results: Behavioral: Hallucinations, distorted perceptions. - "U.S. Bureau of Mines Report of Investigation No. 2979," Patty, F.A., and W.P. Yant, 1929 Volume, Vol/p/yr: 2979,-, 1929 Acute toxicity, LC50, Inhalation, Rat, 103.0 GM/M3, 4 H. Results: Behavioral: Change in motor activity (specific assay). Behavioral: Alteration of classical conditioning. Gigiena Truda i Professional'nye Zabolevaniya. (Labor Hygiene and Occupational Disease), V/O Mezhdunarodnaya Kniga, Moscow 113095 Russia, Vol/p/yr: 32(10),23, 1988 Acute toxicity, LCLO, Inhalation, Mouse, 59.00 GM/M3, 41 M. Results: Behavioral: Convulsions or effect on seizure threshold. - Biochemische Zeitschrift., For publisher information, see EJBCAI, Berlin Germany, Vol/p/yr: 115,235, 1921 Acute toxicity, LD50, Intravenous, Mouse, 222.0 MG/KG. Results: Brain and Coverings: Changes in circulation (hemorrhage,thrombosis, etc. Lungs, Thorax, or Respiration: Dyspnea. Gastrointestinal:Nausea or vomiting. - Journal of Pharmaceutical Sciences., American Pharmaceutical Assoc., 2215 Constitution Ave., NW, Washington, DC 20037, Vol/p/yr: 67,566, 1978

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
142-82-5	Heptane	n.a.	n.a.	n.a.	n.a.
60-29-7	Ethane, 1,1'-Oxybis-	n.a.	n.a.	n.a.	n.a.
124-38-9	Carbon dioxide	n.a.	n.a.	n.a.	n.a.



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Section 12. Ecological Information						
Section 13. Disposal Considerations						
13.1 Waste Metho	•	sidues and spilled materi ade in accordance with fe		•	bility. Disposal should be	
		Section 14. Tran	nsport Inform	nation		
14.1 LANI	D TRANSPORT (US I	OOT):				
	ard Class:	Consumer Commodity ORM-D OR	M-D			
ADR/RID UN Num	14.1       LAND TRANSPORT (European ADR/RID):         ADR/RID Shipping Name:         UN Number:         Hazard Class:       N.A.					
	INE TRANSPORT (IN	-				
IMDG/IN UN Num Hazard (		Aerosols, Ltd. Qty. 1950 N.A.	Packing G IMDG Clas Marine Po	ssification:	2.1 No	
14.3 AIR 1	RANSPORT (ICAO/I	ATA):				
ICAO/IA1 UN Num	TA Shipping Name:	Aerosols, flammable, 2.	1, Ltd Qty			
Hazard C		N.A.	IATA Class	sification:	2.1	
		Section 15. Regu	latory Inforn	nation		
EPA SARA (S	Superfund Amendment	s and Reauthorization Act	of 1986) Lists			
CAS #	Hazardous Compon	ents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)	
142-82-5	Heptane		No	No	No	
60-29-7	Ethane, 1,1'-Oxybis-		No	Yes 100 LB	No	
124-38-9	Carbon dioxide		No	No	No	
CAS #	Hazardous Compon	ents (Chemical Name)	Other US EPA or	r State Lists		
142-82-5						
60-29-7	Ethane, 1,1'-Oxybis-		CAA HAP,ODC: No; CWA NPDES: No; TSCA: Inventory, 4 Test, 8A PAIR; CA PROP.65: No; CA TAC, Title 8: Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: Part 5; NC TAP: No; NJ EHS: Yes - 0701; NY Part 597: Yes; PA HSL: Yes - E; SC TAP: No; WI Air: No			
124-38-9						
<b>CAS #</b> 142-82-5	Hazardous Compon Heptane	ents (Chemical Name)	International Rea Canadian DSL: N Yes	•	SL: No; Taiwan TCSCA:	



Yes

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60-29-7 Ethane, 1,1'-Oxybis-

124-38-9 Carbon dioxide

Canadian DSL: Yes; Canadian NDSL: No; Taiwan TCSCA: Yes

Canadian DSL: Yes; Canadian NDSL: No; Taiwan TCSCA:

Section 16. Other Information			
Revision Date:	08/29/2013		
Additional Information About This Product:	No data available.		
Company Policy or Disclaimer:	Cyclo Industries, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose. Cyclo Industries, Inc. makes no representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose with respect to the information set forth herein or to the product to which the information refers. Accordingly, Cyclo Industries, Inc. will not be responsible for damages resulting from use of or reliance upon this information.		