# spectrum®



# SAFETY DATA SHEET

Preparation Date: 11/2/2015 Revision Date: Not Applicable Revision Number: Not Applicable						
1. IDENTIFICATION						
Product identifier						
Product code:	P1705					
Product Name:	Poly(caprolactone), flakes					
Other means of identification						
Synonyms:	2-Oxepanone Homopolymer					
	Caprolactum homopolymer					
CAS #:	24980-41-4					
RTECS #	Not available					
CI#:	Not available					
Recommended use of the chemi	cal and restrictions on use					
Recommended use: No information available.						
Jses advised against No information available						
Supplier:	Spectrum Chemical Mfg. Corp					
	14422 South San Pedro St.					
	Gardena, CA 90248					
	(310) 516-8000					
Order Online At:						
Emergency telephone number	Chemtrec 1-800-424-9300					
Contact Person:	Martin LaBenz (West Coast)					
Contact Person:	Ibad Tirmiz (East Coast)					
	2 HAZARDS IDENTIFICATION					

# 2. HAZARDS IDENTIFICATION

#### Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

#### Label elements

Not classified

Hazards not otherwise classified (HNOC) Not Applicable

# **3. COMPOSITION/INFORMATION ON INGREDIENTS**

Components	CAS-No.	Weight %
Poly(caprolactone)	24980-41-4	100
24980-41-4		

# 4. FIRST AID MEASURES

First aid measures General Advice:	National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222
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 effec	ts, both acute and delayed

Symptoms May cause eye/skin irritation.

Indication of any immediate medical attention and special treatment 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-FIGHTING MEASURES**

Extinguishing Media Suitable Extinguishing Media:	Carbon dioxide (CO2). Dry chemical. Water spray mist or foam.
Unsuitable Extinguishing Media:	No information available.
Specific hazards arising from the chemical	
Hazardous Combustion Products:	Carbon monioxide; Carbon dioxide
Specific hazards:	May be combustible at high temperatures
Special Protective Actions for Firefighters	

#### **Specific Methods:**

Special Protective Equipment for Firefighters:

No information available.

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. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Remove all sources of ignition.			
Environmental precautions	No information available.			
Methods and material for containment and cleaning up				
Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.				
Methods for cleaning up	Sweep up and shovel into suitable containers for disposal. 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. Avoid dust formation. All equipment used when handling the product must be grounded. Keep away from incompatible materials.

#### Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Avoid dust formation. Do not ingest. Do not breathe vapors/dust. Handle in accordance with good industrial hygiene and safety practice.

#### Conditions for safe storage, including any incompatibilities

#### **Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

#### Incompatible Materials:

Strong oxidizing agents.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters** 

#### National occupational exposure limits

U.S Occupational Exposure Limits: Not determined

United States

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Poly(caprolactone)	None	None	None	None
24980-41-4				

#### Canada

Canada Occupational Exposure Limits: Not determined

Components	Alberta	British Columbia	Ontario	Quebec
Poly(caprolactone) 24980-41-4	None	None	None	None

#### Australia and Mexico

Occupational Exposure Limits for Australia and Mexico: Not determined

Components	Australia	Mexico
Poly(caprolactone) 24980-41-4	None	None

#### Appropriate engineering controls

#### Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

#### Individual protection measures, such as personal protective equipment

#### Personal Protective Equipment

Eye protection:	Safety glasses Safety glasses with side-shields		
Skin and body protection:	Long sleeved clothing. Chemical resistant apron. Gloves.		
Respiratory protection:	Effective dust mask. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds), inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.		
Hygiene measures:	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.		

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid

Odor: Odorless.

Molecular/Formula weight: Average molecular weight: 14000

Flash Point Tested according to: Not available

**Upper Explosion Limit (%):** No information available

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

Density (g/cm3): 1.146 @ 25 deg. C.

**Evaporation rate:** No information available

Odor threshold (ppm): No information available

**Miscibility:** No information available Appearance: Flakes.

Taste No information available

Flammability: No information available

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

**pH:** No information available

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

**Specific gravity:** No information available

Vapor density: No information available

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

Solubility: Insoluble in water **Color:** White. Beige. Off-white.

Formula: (C6H10O2)n

Flashpoint (°C/°F): No information available.

Lower Explosion Limit (%): No information available

Melting point/range(°C/°F): 58-60 °C/136-140 °F

Bulk density: No information available

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 strong oxidizing agents

Chemical stability Stability:	Stable under recommended storage conditions
Possibility of Hazardous Reactions:	Hazardous polymerization does not occur
Conditions to avoid:	Heat. Incompatible materials.
Incompatible Materials:	Strong oxidizing agents.
Hazardous decomposition products:	Carbon monoxide. Carbon dioxide.

Other Information Corrosivity:

No information available

Special Remarks on Corrosivity: No information available

# **11. TOXICOLOGICAL INFORMATION**

#### Information on likely routes of exposure

Principal Routes of Exposure: Ingestion. Inhalation.

#### **Acute Toxicity**

#### **Component Information**

#### Poly(caprolactone) - 24980-41-4

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.
Eye Contact:	May cause eye irritation.
Inhalation	May cause irritation of respiratory tract.
Ingestion	Health injuries are not known or expected under normal use.
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.

Sensitization: No information available

#### **Mutagenic Effects:**

No information available

Carcinogenic effects:

No information available.

Components	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
					Substances	Substances
Poly(caprolactone)	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

Reproductive toxicity	No data is available
Reproductive Effects:	No information available
Developmental Effects:	No information available
Teratogenic Effects:	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	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Poly(caprolactone)	None	None	None	None

# **14. TRANSPORT INFORMATION**

DOT

#### **14. TRANSPORT INFORMATION**

		14. IRANSPORT	INFO
	UN-No:	Not Regulated	
	Proper Shipping Name:	No information available	
	Hazard Class:	No information available	
	Subsidiary Risk:	No information available	
	Packing Group:	None	
	ERG No:	No information available	
	Marine Pollutant	No data available	
	DOT RQ (lbs):	No information available	
	Special Provisions	No Information available	
	Symbol(s):	No information available	
	Cymbol(S).		
TDO			
IDG	(Canada)	Net De sudate d	
	UN-No:	Not Regulated	
	Proper Shipping Name:	No information available	
	Hazard Class:	No information available	
	Subsidiary Risk:	No information available	
	Packing Group:	No information available	
	Marine Pollutant	No Information available	
ADR			
	UN-No:	Not Regulated	
	Proper Shipping Name:	No information available	
	Hazard Class:	No information available	
	Packing Group:	No information available	
	Subsidiary Risk:	No information available	
	••••••••••••••••••••••••••••••••••••••		
IMO	/ IMDG		
	UN-No:	Not Regulated	
	Proper Shipping Name:	No information available	
	Hazard Class:	No information available	
	Subsidiary Risk:	No information available	
	Packing Group:	No information available	
	Marine Pollutant	No information available	
RID	UN-No:	Not Dogulated	
	•••••••	Not Regulated No information available	
	Proper Shipping Name:	No information available	
	Hazard Class:		
	Subsidiary Risk:	No information available	
	Packing Group:	No information available	
	_		
ICAC			
	UN-No:	Not Regulated	
	Proper Shipping Name:	No information available	
	Hazard Class:	No information available	
	Subsidiary Risk:	No information available	
	Packing Group:	No information available	
ΙΑΤΑ	N Contraction of the second seco		
	UN-No:	Not Regulated	
	Proper Shipping Name:	No information available	
	Hazard Class:	No information available	
	Subsidiary Risk:	No information available	
	Packing Group:	No information available	
	ERG Code:	No information available	
	Special Provisions	No information available	

**Special Provisions** 

No information available

## **15. REGULATORY INFORMATION**

#### **International Inventories**

Components	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Poly(caprolactone)	Present XU	Present KE- 27461	Present	Present (7)- 1065	Present	Present	Not present

#### **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)

#### Chemicals Known to the State of California to Cause Reproductive Toxicity:

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

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Poly(caprolactone)	Not Listed	Not Listed	Not Listed	Not Listed

#### CERCLA/SARA

	CERCLA - Hazardous Substances and their	Hazardous	Hazardous	<b>Chemical Category</b>	Section 313 - Reporting de minimis
	<b>Reportable Quantities</b>	Substances and TPQs	Substances and RQs		
Poly(caprolactone)	None	None	None	None	None

#### U.S. TSCA

•	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Poly(caprolactone)	Not Applicable	Not Applicable

#### Canada

## WHMIS hazard class:

Non-controlled

#### **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

Components	Canada (DSL)	Canada (NDSL)
Poly(caprolactone)	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances
Poly(caprolactone)	Not listed

Components	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting

#### **EU Classification**

#### R-phrase(s)

not determined (not applicable)

# <u>S -phrase(s)</u> none

Components	Classification	Concentration Limits:	Safety Phrases
Poly(caprolactone)		No information	

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

Indication of danger: None.

# **16. OTHER INFORMATION**

#### **16. OTHER INFORMATION**

Preparation Date: Revision Date: Prepared by:

**Disclaimer:** 

11/2/2015 Not Applicable Sonia Owen

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