

## SAFETY DATA SHEET

# PDC-1200

### SECTION 1 - IDENTIFICATION OF SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

**DISTRIBUTED BY:** Crown Products & Services, Inc.  
319 S. Gillette Ave.  
Suite 303  
Gillette, WY 82716  
307-696-8175

**PRODUCT NAME:** PDC-1200

**TYPE OF PRODUCT:** Mixture

**RECOMMENDED USE:** Processing aid for industrial applications.

### SECTION II - HAZARDS IDENTIFICATION

**CLASSIFICATION:** Skin Irritant  
Eye Damage

**SIGNAL WORD:** Danger

**HAZARD STATEMENT(S):** Causes skin irritation  
Causes serious eye damage

#### Pictograms



Skin Irritant / Serious Eye Damage

#### PRECAUTIONARY STATEMENT(S):

**Prevention:** Wear protective gloves/ eye protection/ face protection  
Wash hands and exposed skin thoroughly after handling.

**Response:** If in eyes, rinse cautiously with water for several minutes.  
Remove contact lenses if present and easy to do. Continue rinsing.  
Immediately call a Poison Control or Doctor, Physician.  
If on skin, wash with plenty of soap and water. If skin irritation persists,  
get medical advice/attention.

**Storage:** None

**Disposal:** None

**OTHER HAZARDS:** None

### SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS

#### MIXTURES

Hazardous Components	WT%	CAS #
Alkylphenol ethoxylates	< 20%	Confidential
Fatty alcohols alkoxyated	< 20%	Confidential
D-Limonene	< 1%	5989-27-5
Fatty quaternary ammonium salt	< 1%	Confidential

### SECTION IV - FIRST AID MEASURES

<b>INHALATION:</b>	If inhaled, immediately remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
<b>SKIN CONTACT:</b>	Wash off immediately with plenty of water. Take off all contaminated clothing immediately. Get medical attention if irritation develops and persists.
<b>EYE CONTACT:</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>INGESTION:</b>	Consult a physician. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.
<b>MOST IMPORTANT SYMPTOMS AND EFFECTS, ACUTE/DELAYED:</b>	Risk of serious damage to eyes. Contact causes skin irritation. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

### SECTION V - FIREFIGHTING MEASURES

<b>EXTINGUISHING MEDIA:</b>	Water spray, Dry powder, Foam or Carbon dioxide. Do not use high volume water jet it will spread fire.
<b>SPECIAL HAZARDS:</b>	Thermal decomposition may produce: nitrogen oxides (NO <sub>x</sub> ), carbon oxides (CO <sub>x</sub> ). Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.
<b>PROTECTIVE MEASURES:</b>	Wear self contained breathing apparatus for fire fighting if necessary.
<b>OTHER INFORMATION:</b>	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

**SECTION VI - ACCIDENTAL RELEASE MEASURES**

- PERSONAL PRECAUTIONS:** Avoid contact with skin and eyes. Use personal protective equipment. Safety glasses and neoprene gloves should be worn especially if frequent or prolonged contact is expected.
- ENVIRONMENTAL PRECAUTIONS:** As with all chemical products, do not flush into surface water.
- SPILL AND LEAK PROCEDURES:** Keep people away from spill/leak. Prevent further leakage or spillage if safe to do so. For small spills do not flush with water, wipe up with absorbant materials. Sweep up and shovel into suitable containers for disposal. For large spills, do not flush with water. Soak up with inert absorbent material. Shovel into suitable container for disposal. After cleaning, flush away traces with water.

**SECTION VII - HANDLING AND STORAGE**

- HANDLING:** Avoid contact with skin and eyes. Use personal protective equipment.
- STORAGE:** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Incompatible with oxidizing agents.

**SECTION VIII - EXPOSURE CONTROL/PERSONAL PROTECTION**

- VENTILATION:** Use local exhaust if misting occurs. Natural ventilation is adequate in absence of mists. Ensure adequate ventilation, especially in confined areas.
- EYE PROTECTION:** Safety glasses with side-shields. Tightly fitting safety goggles.
- SKIN/HAND PROTECTION:** Wear appropriate clothing and/or chemical apron and rubber footwear where skin contact is possible. Impervious gloves. Be aware that liquid may permeate gloves, frequent change is advised. Suitable gloves can be recommended by the glove supplier.
- RESPIRATORY PROTECTION:** No personal respiratory protective equipment normally required. In case of insufficient ventilation wear suitable respiratory equipment.
- ADDITIONAL ADVICE:** Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.
- ENVIRONMENTAL EXPOSURE:** Do not allow uncontrolled discharge of product into the environment.

**SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State:</b>	<b>Clear to slightly yellow liquid</b>
<b>Odor:</b>	<b>Mild Citrus</b>
<b>Odour Threshold:</b>	<b>Not determined</b>
<b>pH:</b>	<b>Not determined</b>
<b>Melting point/freezing point:</b>	<b>Not determined</b>
<b>Initial boiling point&amp; boiling range:</b>	<b>&gt; 100°C</b>
<b>Flashpoint:</b>	<b>&gt; 100°C</b>
<b>Evaporation Rate:</b>	<b>&lt; 1 (ethyl ether = 1)</b>
<b>Flammability (solid, gas):</b>	<b>Not applicable</b>
<b>Upper/lower flammability or explosive limits:</b>	<b>Not expected to create explosive atmospheres.</b>
<b>Vapor Pressure:</b>	<b>Not determined</b>
<b>Vapor Density:</b>	<b>Not determined</b>
<b>Relative Density:</b>	<b>1.0 - 1.1</b>
<b>Solubility in Water:</b>	<b>Completely miscible</b>
<b>Partition coefficient:</b>	<b>Not applicable</b>
<b>Autoignition temperature:</b>	<b>Not determined</b>
<b>Decomposition temperature:</b>	<b>Not determined</b>
<b>Viscosity:</b>	<b>Not determined</b>
<b>Explosive properties:</b>	<b>Not expected to be explosive based on the chemical structure.</b>
<b>Oxidizing properties:</b>	<b>Not expected to be explosive based on the chemical structure.</b>

**SECTION X - STABILITY AND REACTIVITY**

<b>REACTIVITY:</b>	Stable at normal conditions.
<b>CHEMICAL STABILITY:</b>	Stable at normal ambient temperature and pressure.
<b>POSSIBILITY OF HAZARDOUS REACTIONS:</b>	None known
<b>CONDITIONS TO AVOID:</b>	Keep away from heat and sources of ignition.
<b>CHEMICAL INCOMPATIBILITY:</b>	Strong oxidizing agents.
<b>HAZARDOUS DECOMPOSITION PRODUCTS:</b>	Thermal decomposition may produce: nitrogen oxides (NO <sub>x</sub> ), carbon oxides (CO <sub>x</sub> ), hydrogen cyanide (hydrocyanic acid).

### SECTION XI - TOXICOLOGICAL INFORMATION

<b>ACUTE ORAL TOXICITY:</b>	LD50/oral/rat = 3000 - 5000 mg/kg (Estimated)
<b>ACUTE DERMAL TOXICITY:</b>	LD50/dermal/rabbit = > 2000 mg/kg
<b>ACUTE INHALATION TOXICITY:</b>	The product is not expected to be toxic by inhalation.
<b>SKIN CORROSION/IRRITATION:</b>	Irritating to skin.
<b>SERIOUS EYE DAMAGE/EYE IRRITATION:</b>	Risk of serious damage to eyes.
<b>RESPIRATORY/SKIN SENSITISATION:</b>	The product contains a small amount of sensitising substances which may provoke an allergic reaction among sensitive individuals in contact with skin.
<b>MUTAGENICITY:</b>	Based on available data, product is not expected to be mutagenic.
<b>CARCINOGENICITY:</b>	Based on available data, product is not expected to be carcinogenic.
<b>REPRODUCTIVE TOXICITY:</b>	Based on available data, product is not expected to be toxic for reproduction.
<b>STOT - SINGLE EXPOSURE:</b>	No known effects
<b>STOT - REPEATED EXPOSURE:</b>	No known effects
<b>ASPIRATION HAZARD:</b>	No hazards resulting from the material as supplied.

Relevant information on the hazardous components:

Component	Acute Oral	Acute Dermal	Acute Inhalation
Alkylphenol ethoxylates	960-3980 mg/kg	2000-2991 mg/kg	1.15 mg/L
Fatty alcohols alkoxyated	1800 mg/kg	> 2000 mg/kg	Not expected to be toxic
D-Limonene	> 2000 mg/kg	> 5000 mg/kg	Not expected to be toxic
Fatty quaternary ammonium salt	300-2000 mg/kg	Not determined	Not determined

### SECTION XII - ECOLOGICAL INFORMATION

**Ecotoxicity:** Toxic to aquatic life.

Components	Species	Test Results
<i>Acute-Toxicity to Fish</i>		
Fish LC50	Danio rerio	96 hours = 1 - 10 mg/L (Estimated)
Crustacea EC50	Daphnia	48 hours = 5 - 20 mg/L. (Estimated)
Algae IC50	Algae	72 hours = 7 - 70 mg/L (Estimated)
<i>Chronic-Toxicity to Fish and Invertebrates</i>		
Harmful, may cause long-term adverse effects in the aquatic environment.		

\*Estimates for product may be based on additional component data not shown.

<b>Toxicity to microorganisms:</b>	No data available
<b>Effects on terrestrial organisms:</b>	No data available
<b>Sediment toxicity:</b>	No data available

**SECTION XII - ECOLOGICAL INFORMATION (continued)**

**HAZARDOUS COMPONENTS TESTED:**

Component	Species	Test Results
<b>Acute-Toxicity: Alkylphenol ethoxylates</b>		
Fish LC50	Pimephales promelas	96 hours = 3.8 - 6.2 mg/L
Crustacea EC50	Daphnia magna	48 hours = 9.3 - 21.4 mg/L
Algae IC50	Algae	Not determined
<b>Chronic-Toxicity: Alkylphenol ethoxylates</b>		
Fish: No data available		
Invertebrates: No data available		

*\*Estimates for product may be based on additional component data not shown.*

**Toxicity to microorganisms:** EC50/activated sludge/16 hours > 1000 mg/L  
**Effects on terrestrial organisms:** No data available  
**Sediment toxicity:** No data available

Component	Species	Test Results
<b>Acute-Toxicity: Fatty alcohols alkoxylated</b>		
Fish LC50	Pimephales promelas	96 hours = 1 - 10 mg/L
Crustacea EC50	Daphnia magna	48 hours = 1 - 10 mg/L
Algae IC50	Algae	96 hours = 1 - 10 mg/L
<b>Chronic-Toxicity: Fatty alcohols alkoxylated</b>		
Fish: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment		
Invertebrates: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment		

*\*Estimates for product may be based on additional component data not shown.*

**Toxicity to microorganisms:** No data available  
**Effects on terrestrial organisms:** No data available  
**Sediment toxicity:** No data available

Component	Species	Test Results
<b>Acute-Toxicity: D-Limonene</b>		
Fish LC50	Pimephales promelas	96 hours = 0.72 mg/L
Crustacea EC50	Daphnia magna	48 hours = 0.36 mg/L.
Algae IC50	Desmodesmus subspicatus	72 hours = 8 mg/L
<b>Chronic-Toxicity: D-Limonene</b>		
Fish: No data available		
Invertebrates: NOEC/Daphnia/16 days = 0.115 mg/L		

*\*Estimates for product may be based on additional component data not shown.*

**SECTION XII - ECOLOGICAL INFORMATION (continued)**

**Toxicity: D-Limonene (continued)**

**Toxicity to microorganisms:** EC50/activated sludge/3 hours = 209 mg/L  
**Effects on terrestrial organisms:** No data available  
**Sediment toxicity:** No data available

Component	Species	Test Results
<b>Acute-Toxicity: Fatty quaternary ammonium salt</b>		
Fish LC50	Pimephales promelas	96 hours = 0.1 - 0.117 mg/L
Crustacea EC50	Daphnia magna	No data available
Algae IC50	Algae	No data available
<b>Chronic-Toxicity: Fatty quaternary ammonium salt</b>		
Fish: No data available		
Invertebrates: No data available		

*\*Estimates for product may be based on additional component data not shown.*

**Toxicity to microorganisms:** No data available  
**Effects on terrestrial organisms:** No data available  
**Sediment toxicity:** No data available

**PERSISTENCE AND DEGRADABILITY:**

**Degradation:** Not readily biodegradable  
**Hydrolysis:** No data available  
**Photolysis:** No data available

**RELEVANT INFORMATION ON HAZARDOUS COMPONENTS:**

**Alkylphenol ethoxylates:** **Degradation:** Not readily biodegradable.  
 < 60% / 28 days (OECD 301 B)  
**Hydrolysis:** No data available  
**Photolysis:** No data available

**Fatty alcohols alkoxyated:** **Degradation:** Expected to be ultimately biodegradable.  
**Hydrolysis:** No data available  
**Photolysis:** No data available

**D-Limonene:** **Degradation:** Readily biodegradable.  
 80% / 28 days (OECD 301 D)  
**Hydrolysis:** No data available  
**Photolysis:** Half-life: 0.015 - 0.037 days

**Fatty quaternary ammonium salt:** **Degradation:** No data available  
**Hydrolysis:** No data available  
**Photolysis:** No data available

**SECTION XII - ECOLOGICAL INFORMATION (continued)**

**BIOACCUMULATIVE POTENTIAL:** The product is not expected to bioaccumulate.

Partition co-efficient (Log Pow): Not applicable

Bioconcentration factor (BCF): Not applicable

**RELEVANT INFORMATION ON  
HAZARDOUS COMPONENTS:**

***Alkylphenol ethoxylates***

Partition co-efficient (Log Pow): 2.1 - 3.4

Bioconcentration factor (BCF): 5.9 - 48

***Fatty alcohols alkoxyated***

Partition co-efficient (Log Pow): Not applicable

Bioconcentration factor (BCF): Not applicable

***D-Limonene***

Partition co-efficient (Log Pow): 4.4 @ 37°C, pH 7 (OECD 117)

Bioconcentration factor (BCF): 361 - 1022 L/kg

***Fatty quaternary ammonium salt***

Partition co-efficient (Log Pow): Not applicable

Bioconcentration factor (BCF): No data available

**MOBILITY IN SOIL:** No data available

**RELEVANT INFORMATION ON  
HAZARDOUS COMPONENTS:**

***Alkylphenol ethoxylates*** No data available

***Fatty alcohols alkoxyated*** No data available

***D-Limonene*** 1120 - 6324

***Fatty quaternary ammonium salt*** No data available

**OTHER ADVERSE EFFECTS:** None known



**SECTION XIII - DISPOSAL INFORMATION**

**WASTE DISPOSAL METHOD:** Dispose in accordance with local and national regulations. If recycling is not practicable, dispose of in compliance with local regulations. Recycle In accordance with local and national regulations.

**SECTION XIV - TRANSPORTATION INFORMATION**

**LAND TRANSPORT (DOT)** Not Classified  
**SEA TRANSPORT (IMDG)** Not Classified  
**AIR TRANSPORT (IATA)** Not Classified  
**PROPER SHIPPING NAME:** PDC-1200

**SECTION XV - REGULATORY INFORMATION**

<b>NFPA RATING:</b>	Health:	3	<b>HMIS RATING:</b>	Health:	3
	Flammability:	1		Flammability:	1
	Instability:	0		Physical Hazard	0
		PPE:		B	



**TSCA:** All components of this product are either listed on the inventory or are exempt from listing.

**US SARA (Section 311/312):** Acute  
**(Section 313):** *None*  
**RCRA:** Not RCRA hazardous.

**CALIFORNIA PROP 65 INFO:** WARNING! This product contains a chemical known in the State of California to cause cancer, Acetaldehyde, Ethanol in alcoholic beverages, Ethylene glycol (ingested), Ethylene oxide, Chloromethane, Propylene oxide.

**SECTION XVI - OTHER INFORMATION**

**ABBREVIATIONS AND SYMBOLS:** < Less Than > More Than

**PREPARED IN ACCORDANCE WITH:** U.S. Code of Federal Regulations 29 CFR 1910.1200

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**End of Safety Data Sheet**