

## SAFETY DATA SHEET

### 1. IDENTIFICATION

Product identifier used on the label

: **Flottec 8020 Collector**

Recommended use of the chemical and restrictions on use

: Collectors for industrial mineral applications

Chemical family

: Mixture of Dithiophosphates

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:

**Flottec, LLC**

338 West Main Street  
Boonton, NJ 07005 U.S.A.  
www.flottec.com

Information Telephone # : (973) 588 4717

24 Hr. Emergency Tel # : Chemtrec 1-800-424-9300 (Within Continental U.S.); Chemtrec 703-527-3887 (Outside U.S.)

### 2. HAZARDS IDENTIFICATION

Classification of the chemical

N/ Av

Label elements

**Signal Word**

Danger

**Hazard statement(s)**

N/ Av

**Precautionary statement(s)**

N/ Av

**Hazard pictogram(s)**



**Other hazards**

N/ Av

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Common name	CAS #	Concentration / wt %
Dithiophosphate modified	Proprietary	65-75%
Poliotelet	25322-69-4	0-25%
Water	7732-18-5	25-35%

The exact concentrations of the above listed chemicals are being withheld as a trade secret.

### 4. FIRST-AID MEASURES

Description of first aid measures

- Ingestion* : DO NOT induce vomiting, unless recommended by medical personnel. Never give anything by mouth if victim is unconscious or convulsing. If spontaneous vomiting occurs, keep head below hips level to prevent aspiration into the lungs. Seek medical attention or contact a Poison Centre immediately. If victim is conscious wash out mouth with water and give 1-2 glasses of water to drink.
- Inhalation* : Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen by trained personnel. If a problem develops or persists, seek medical attention.
- Skin Contact* : Flush with water for at least 15 minutes. Remove contaminated clothing and wash before reuse. Avoid touching eyes with contaminated body parts. Seek medical attention immediately.
- Eye Contact* : IMMEDIATELY flush with plenty of water. Remove contact lenses. Flush with water for at least 15 minutes. Hold eyelids apart to rinse properly. If a problem develops or persists, seek medical attention. Seek medical attention immediately.

**Symptoms** : May cause irritation to skin and eyes. May cause irritation and burns of skin. May cause burns to the mouth, throat and stomach.

**Notes to the physician** : Treat according to person's condition and specifics of exposure. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

*Suitable extinguishing media*

: Carbon dioxide (CO<sub>2</sub>).

*Unsuitable extinguishing media*

: Do not use carbon tetrachloride or water.

### Special hazards arising from the substance or mixture

: Sulfur dioxide or phosphorus oxides may be formed under fire conditions or carbon oxides (CO, CO<sub>2</sub>).

### Special protective equipment and precautions for firefighters

*Protective equipment for fire-fighters*

: Firefighters must wear self contained breathing apparatus with full face mask. Firefighting suit may not be efficient against chemicals.

*Special fire-fighting procedures*

: Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply.

## 6. ACCIDENTAL RELEASE MEASURES

**For small spills:** Dilute with water and clean. Absorb with dry inert material.

**For large spills:** Ditch the area to prevent spreading, restrict access, to the area until cleaning is complete, ensure that cleaning is carried out by trained personnel using appropriate protective equipment. Absorb with dry inert material, sweep and place in an approved metal rescue drum for disposal. Wash the area after cleaning with water.

## 7. HANDLING AND STORAGE

**Precautions for safe handling** : Use only in well ventilated areas. Avoid contact with skin, eyes and clothing. Do not breathe vapors or aerosols. Wear protective goggles, gloves, and protective clothing tailored to carry out the task and the hazards involved. Stay in the work area only for the time needed to complete the job. Keep containers tightly closed when not in use. Do not eat, drink or smoke during use. Wash hands, forearms and face after using this compound and before eating, drinking or using bath articles. Remove contaminated clothing and wash before reuse.

**Conditions for safe storage** : Store in a well-ventilated dry area. Store away from incompatible materials (see section 10).

**Storage temperature** :

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure controls**

- Appropriate engineering controls :** Provide sufficient mechanical ventilation (general and/or local exhaust) to keep the airborne concentrations of vapors, mists, aerosols or dust below their respective occupational exposure limits. Ensure that safety showers and eye wash stations are close to the work area.
- Respiratory protection :** Respiratory protection is not required in normal use. Respiratory protection equipment (PPE) must be selected, fitted, maintained and inspected in accordance with regulations and CSA Standard Z 94.4 and approved by NIOSH / MSHA. In case of insufficient ventilation or in confined or enclosed space and for an assigned protection factor (APF) up to 10 times the exposure limit: wear a half mask respirator with appropriate cartridges fitted with P100 filters. For an APF until maximum 100 times of exposure limit, wear a full face respirator mask with appropriate cartridges and P100 filters.
- Skin protection :** Personal protective equipment for the body should be selected based on the task being performed and the risks involved. Wear normal work clothing covering arms and legs as required by employer code. Wear an apron or long-sleeve protective cover all suit.
- Eye protection :** Wear chemical splash goggles. If risk of contact with eyes or the face, wear a face shield.
- Hands protection :** Wear nitrile or neoprene gloves. Chemical-resistant, impervious gloves should be worn at all times when handling this chemical product. Before using, user should confirm impermeability. Discard gloves that show tears, pinholes, or signs of wear. Gloves must only be worn on clean hands. Wash gloves with water before removing them. After using gloves, hands should be washed and dried thoroughly.
- Other protective equipment :** Wear rubber boots to clean up a spill.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical state</b>	: Liquid	<b>Flammability limits (% by vol.)</b>	: N/Av
<b>Color</b>	: Light Brown	<b>Flash point</b>	: > 93.4°C (200.1°F) SETA
<b>Odor</b>	: Slight sulfur odor	<b>Auto-ignition temperature</b>	: N/Av
<b>Odor threshold</b>	: N/Av	<b>Sensibility to electrostatic charge</b>	: No
<b>pH</b>	: 10-13	<b>Sensibility to sparks/friction</b>	: No
<b>Melting/Freezing point</b>	: -18°C (-0.4°F)	<b>Vapor density (Air = 1)</b>	: 0.6 to 0.7
<b>Boiling point/range</b>	: N/Av	<b>Relative density (Water = 1)</b>	: 1.15 kg/L @ 25°C (77°F)
<b>Solubility in water</b>	: Soluble	<b>Partition coefficient (n-octanol/water)</b>	: N/Av
<b>Evaporation rate (BuAc = 1)</b>	: Like Water	<b>Decomposition temperature</b>	: N/Av
<b>Vapor pressure</b>	: N/Av	<b>Viscosity</b>	: N/Av
<b>Volatiles (% by weight)</b>	: 50%	<b>Molecular mass</b>	: N/Av
<b>Flammability (solid, gas)</b>	: Not flammable		

**10. STABILITY AND REACTIVITY**

- Reactivity** : In the presence of any incompatible material.
- Chemical stability** : Stable under recommended storage conditions.
- Possibility of hazardous reactions (including polymerizations)** : Hazardous polymerization will not occur.
- Conditions to avoid** : Avoid contact with incompatible materials
- Incompatible materials** : Strong oxidizing agents, reducing agents, organic materials, metals and mineral acids.
- Hazardous decomposition products** : Oxides of carbon (CO, CO2), oxides of sulfur and hydrogen sulfide.

**11. TOXICOLOGICAL INFORMATION**

**Toxicological data**

Chemical name	LC <sub>50</sub> (Inhalation, Rat)	LD <sub>50</sub> / mg/kg	
		(Oral, Rat)	(Dermal, Rabbit)
Mixture of Dithiophosphate	8000ppm	500	5300

**Likely routes of exposure**

- Skin** : Yes
- Eye** : Yes



Inhalation : Yes  
 Ingestion : Yes

**Potential Health Effects:**

**Signs and symptoms of delayed, immediate and chronic effects**

**Skin** : Harmful if absorbed through the skin. May cause skin irritation and burns.  
**Eye** : May cause severe eye irritation or eye damage.  
**Inhalation** : Inhalation of vapors/mists can cause burns of to nose, throat and respiratory tract  
**Ingestion** : May cause burns to mouth, throat and stomach.  
**Sensitization to material** : N/Av.  
**IRAC/NTP Classification** : No ingredients listed  
**Carcinogenicity** : Ingredients present at levels greater than or equal to 0.1% of this product are not listed as a carcinogen by IARC, ACGIH, NIOSH, NTP or OSHA.  
**Mutagenicity** : Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause mutagenic effect.  
**Reproductive Effects** : Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause effects on reproduction.  
**Specific target organ effects – single exposure** : No target organ is listed.  
**Specific target organ effects – repeated exposure** : No target organ is listed.  
**Other information** : N/Av.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity** : N/Av.  
**Persistence** : N/Av.  
**Degradability** : No information available for this product.  
**Bioaccumulation potential** : No information available for this product.  
**Mobility in soil** : No information available for this product.  
**Other adverse environmental effects** : No information available for this product.

**13. DISPOSAL CONSIDERATIONS**

**Handling for Disposal** : Important! Prevent waste generation. Use in full. DO NOT throw residual to sewer, streams, sewers or drinking water supply. Residues and empty containers must be considered as hazardous waste. Return empty container properly labeled to supplier or everywhere there is a recovery program. Dispose via a licensed waste disposal contractor. Observe all federal, state/provincial and municipal regulations. If necessary consult the Department of Environment or the relevant authorities.

**14. TRANSPORTATION INFORMATION**

Regulatory Information	UN Number	UN proper shipping name	Transport hazard class(es)	Packing Group	Label
DOT	UN1719	CAUSTIC ALKALI LIQUID, N.O.S. (CONTAINS DITHIOPHOSPHATE SALT)	8	II	Corrosive
<b>Additional Information</b>		This material is not listed as a marine pollutant. Permit required for transportation with proper placards displayed on vehicle.			
TDG	UN1719	CAUSTIC ALKALI LIQUID, N.O.S. (CONTAINS DITHIOPHOSPHATE SALT)	8	II	Corrosive
<b>Additional Information</b>		Emergency response guidebook 2012 – 154 Permit required for transportation with proper placards displayed on vehicle.			

<b>IMO/IMDG</b>	UN1719	CAUSTIC ALKALI LIQUID, N.O.S. (CONTAINS DITHIOPHOSPHATE SALT)	8	II	Corrosive
<b>Additional Information</b>		Emergency schedules (EmS-No) F-A, S-B			
<b>IATA</b>	UN1719	CAUSTIC ALKALI LIQUID, N.O.S. (CONTAINS DITHIOPHOSPHATE SALT)	8	II	Corrosive
<b>Additional Information</b>					

## 15 - REGULATORY INFORMATION

### Occupational exposure limits:

Modified Dithiophosphate: Not available.  
 Butyl Alcohol: OSHA PEL: 100 ppm TWA.  
 Categories SARA 311/312:  
 1. Acute (acute) health effects: Yes  
 2. Delayed (chronic) health effects: No  
 3. Fire Hazard: Yes  
 4. Danger of sudden release of pressure: No  
 5. Hazardous Reactivity: No

### OTHER CHEMICAL INVENTORY LISTINGS:

Australia: All components of this material are listed on the Australian Inventory of Chemical Substances (AICS).  
 People's Republic of China: All components of this product are listed in the existing inventory of chemicals in China.  
 European Union: All components of this material are in conformity with Directive 92/32 / EEC  
 Japan: All components of this product are on the existing inventory of new chemical substances (ENCS) in Japan, or have an exemption from the list.  
 Korea: All components of this product are listed on the List of Existing Chemicals (ECL) in Korea.  
 Philippines: All components of this product are listed on the Philippine Inventory of Chemical and Chemical Substances (PICCS).  
 United States: All components of this material are listed on the Toxic Substances Control Act (TSCA) Chemical Inventory.

### WHMIS 1988:

N/Av

#### NFPA



#### HMIS



HEALTH
INFLAMMABILITY
REACTIVITY
SPECIAL PROTECTION EQUIPMENT

## 16. OTHER INFORMATION

**Other special considerations for handling** : Provide adequate information, instruction and training for operators.

**Prepared by:** Flottec, LLC

**Revised by:**

**REASON FOR REVISION:**

### DISCLAIMER

The above information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warrant, expressed or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular uses.

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