

# MATERIAL SAFETY DATA SHEET

**PRODUCT: CATHOLYTE  
PRODUCED AT A CONTROLLED 12.0 pH.**

**October 2017**

**Note: This information only relates to catholyte produced by PCT electrolyzed water equipment at the stated salt concentration.**

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## SECTION I. PRODUCT IDENTITY

**Chemical Name:** Catholyte  
**Common name:** Electrochemically activated water containing **0.5% NaCl**  
**Product Type:** Aqueous dilute mixed reductants

### **Composition**

<b>Ingredient</b>	<b>CAS-No</b>	<b>EINECS-NO</b>	<b>Wt/Vol %</b>
Water			99.5%
Sodium chloride	7647-14-5	231-598-3	0.5%
<b>After activation</b>			
NaOH	1310-73-2	215-185-5	< 1000 ppm (0.1%)
OH <sup>-</sup> /OH <sup>•</sup>			< 126 ppm (0.0126 %)
Na <sup>+</sup> as NaOH			<170ppm (0.017%)
Na <sup>+</sup> as NaCl			<1.796ppm (0.1796%)
H <sub>2</sub>			4ml/L
HO <sub>2</sub> <sup>-</sup> /O <sub>2</sub> <sup>2-</sup>			<3000ppm (0.3%)

The mixed reductants are in dynamic equilibrium initially, and gradually after time revert to their original alkalized ingredients. Figures given are maximum values.

**Product Name:** CATHOLYTE

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## SECTION 2. PHYSICAL /CHEMICAL CHARACTERISTICS

**Appearance:** Homogeneous clear, liquid.  
**Boiling point:** 100°C  
**Sp Gravity:** 1.02 – 1.06g/ml  
**Odour:** No odour  
**Taste:** Mild saline/soapy  
**Chemical:** pH =12.0 ±0.3  
**Oxidation Reduction Potential:** ORP = -900 ±100mV  
**Solubility:** Same as water

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### **SECTION 3. FIRE HAZARD AND CONTROL**

Flammability:	Not applicable
Flash point (°C):	Not applicable
Extinguishing media:	Not applicable
Special fire-fighting procedures:	Not applicable

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### **SECTION 4. REACTIVITY DATA**

Stability:	CATHOLYTE is an aqueous solution containing metastable reductants which lose activity immediately on encountering reactants or during approximately 7 to 14 days storage when the ORP will decline from approximately -900 mV to near 0 mV. No hazardous reactions are known when used for its intended purposes
Incompatibility (material to avoid):	CATHOLYTE, like water, is reactive with acid solutions.
Hazardous decomposition or by-products:	CATHOLYTE deactivates to its original components: water, added Sodium Chloride of 5000 ppm and Sodium Hydroxide at 800 - 1000 ppm, which was formed during the electrochemical activation process.

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### **SECTION 5. ENVIRONMENTAL CHARACTERISTICS**

Degradability:	Best when used immediately upon being produced. A shelf life of 7 to 14 days is possible if stored between 40-95° F and kept in a closed plastic container. CATHOLYTE deactivates to its original components: water, added Sodium Chloride of 5000 ppm and Sodium Hydroxide at 800 – 1000 ppm, which was formed during the electrochemical activation process. <b>Should not be stored in a glass container!</b>
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Hazards: CATHOLYTE, generated at pH≤12.0 is non-hazardous to human and animal tissue.  
Other effects: Not applicable

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## **SECTION 6. HEALTH HAZARD DATA**

Acute oral toxicity: None observed  
Acute dermal irritation: Non-irritating  
Acute eye irritation: Non-irritating  
Inhalation: Non-irritating  
Occupational exposure limits: None  
Health hazards: There are no known health hazards.

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## **SECTION 7. EMERGENCY AND FIRST AID PROCEDURES**

Signs and symptoms of poisoning: Not applicable  
First Aid procedures: None specified  
Skin contact: No reports of adverse skin reactions after exposure  
Eye contact: No reports of adverse ocular reactions after exposure  
Ingestion: No reports of adverse reactions after ingestion  
Inhalation: No reports of adverse reactions after inhalation  
Emergency antidote: None (Water)

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## **SECTION 8. MEDICAL ADVICE**

CATHOLYTE has been extensively tested in both humans and animals, and poses no known threat to the welfare of either.

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## **SECTION 9. PRECAUTIONS FOR SAFE HANDLING AND USE**

Handling concentrated product: None  
Handling or applying diluted product: None  
Leaks and Spills: Leaks and spills can be removed the same as for ordinary water.  
Waste disposal: CATHOLYTE can be disposed of in municipal drains without adverse effects after use. Local environmental regulatory requirements should be followed, which may require CATHOLYTE to be

Storage:

deactivated. This can be done by mixing with ANOLYTE or water.

Optimal efficacy of the product will be prolonged if stored away from direct sunlight, in sealed opaque or tinted plastic containers and avoiding high temperatures.

**Avoid storing in glass container!**

Other precautions:

None

**FOR FURTHER INFORMATION REFER TO:**

**PCT Corp.**

**4235 Commerce Street**

**Little River, SC 29566**

**(843)390-7900**

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DISCLAIMER:

This information is based on our current knowledge and is intended to describe the product for the purposes of health and safety requirements only. It should not, therefore, in itself be construed as a guarantee of any specific quality relating to the product.

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