


## MATERIAL SAFETY DATA SHEET

### SECTION 1 - PRODUCT IDENTIFICATION

<b>Product name</b>	MIURA C611	<b>Chemical family</b>
<b>Product use</b>	COOLING WATER TREATMENT	
<b>Supplier</b>	 8 Copernicus Blvd. Brantford, ON N3P 1Y4 Tel: 519-758-8111	<b>Emergency Telephone #:</b> 613-996-6666

### SECTION 2 - INGREDIENTS

INGREDIENTS	CAS #	%	LC50 ppm (Rat, Inhal)	LD50 ppm (Rat, Oral)
SODIUM HYPOCHLORITE	7681-52-9	7-15	N/A	12

### SECTION 3 - PHYSICAL DATA

<b>Boiling Point:</b>	> 140 (Deg F)	<b>Specific Gravity:</b>	1.10
<b>Vapor pressure:</b>	17.5	<b>Evaporation rate:</b>	N/A
<b>Vapor density:</b>	N/A	<b>Solubility in water:</b>	COMPLETE
<b>Volatiles in %:</b>	90	<b>Freezing point:</b>	0 Deg C
<b>pH:</b>	8.5	<b>Auto-ignition temperature:</b>	N/A
<b>Coefficient of water/oil distribution:</b> N/A			
<b>Appearance and odor</b>	CLEAR GREENISH YELLOW SOLUTION HAVING A STRONG CHLORINE ODOUR.		
<b>Odor Threshold:</b>	N/A		

### SECTION 4 - FIRE AND EXPLOSION DATA

<b>Flash Point (method):</b>	N/A	<b>LEL:</b>	N/A	<b>UEL:</b>	N/A
<b>Extinguishing media:</b>	WATER.				
<b>Special fire fighting instructions.</b>	PROTECT FIREFIGHTERS AGAINST CORROSIVE FUMES AND LIQUID IF RELEASED. APPLY WATER TO COOL CONTAINERS AND TANKS. SODIUMU				
<b>Unusual fire and explosion hazards:</b>					

## MATERIAL SAFETY DATA SHEET

### SECTION 5 - REACTIVITY DATA

**Stability:** Unstable

**Incompatibility:** STRONG ACIDS; STRONG CAUSTIC

**Hazard decomposition products:** CHLORINE AND OXYGEN.

**Polymerisation** Will not occur

### SECTION 6 - HEALTH HAZARD INFORMATION

**ROUTES OF EXPOSURE AND ACUTE EFFECTS**

**Exposure limit:** N/A

**Inhalation:**

**Skin:** IRRITATION TO NOSE AND THROAT. COUGHING, DIFFICULTY BREATHING MAY CAUSE PULMONARY EDEMA

**Eyes:** CAUSES SEVERE SKIN IRRITATION WITH BLISTERING AND ECZEMA.

**Ingestion:** CAUSES SEVERE IRRITATION OF THE MUCUOUS MEMBRANES OF THE EYES. MAY CAUSE SEVERE EYE DAMAGE

**Chronic effects:** ABDOMINAL CRAMPS, NAUSEA, VOMITING, DIARRHEA SHOCK, MAY LEAD TO CONVULSIONS COMA AND DEATH

### FIRST AID

**Inhalation:**

**Skin:** REMOVE TO FRESH AIR AND OBTAIN MEDICAL HELP IMMEDIATELY.

**Eye:** REMOVE CONTAMINATED CLOTHING IMMEDIATELY AND FLUSH WITH WATER FOR AT 15 MINUTES. GET MEDICAL AID

**Ingestion:** HOLD EYELIDS OPEN AND WASH THOROUGHLY WITH CLEAN WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION.

### SECTION 7 - SPILL, LEAK, AND DISPOSAL PROCEDURES

**Spill, leak or release:** GET IMMEDIATE MEDICAL ATTENTION. RINSE OUT MOUTH WITH WATER. GIVE LARGE AMOUNTS OF WATER TO DRINK. INDUCE VOMITING AND GIVE MORE WATER TO DRINK

**Waste disposal:**

DO NOT ALLOW CHEMICAL TO ENTER SEWER OR WATER WAYS. DYKE SPILLS WITH NON COMBUSTIBLE MATERIAL

## MATERIAL SAFETY DATA SHEET

### SECTION 8 - SPECIAL PROTECTION INFORMATION]

**Respiratory protection** IN ACCORDANCE WITH FEDERAL AND LOCAL REGULATIONS.

**Ventilation:** CANISTER TYPE RESPIRATOR SUITABLE FOR CHLORINE.

**Protective Gloves:** Local exhaust

**Eye protection:** RUBBER OR PVC.

**Other protective equipment:** CHEMICAL SAFETY GOGGLES.

### SECTION 9 - SPECIAL PRECAUTIONS

**Storage and handling conditions:** RUBBER BOOTS AND APRON.

### SECTION 10 - SPECIAL SHIPPING REQUIREMENTS

**Proper shipping name:** STORE IN COOL DRY LOCATION. NOT IN DIRECT SUNLIGHT. KEEP CONTAINER CLOS

**P.I.N #** SODIUM HYPOCHLORITE 12% SOLUTION

**Prepared by:** Mike Wiens

**Preparation date:** 12/21/2009