MATERIAL SAFETY DATA SHEET SECTION I – MATERIAL IDENTIFICATION AND USE

MATERIAL NAME: Q 1000

MANUFACTURERS NAME:

SUPPLIERS NAME: CP INDUSTRIES LTD. **QUALITY CHEMICALS MFG.** 225 BLACK STREET 215 DOLOMITE DRIVE

FERGUS, ONTARIO N1M 1A5 DOWNSVIEW, ONTARIO M3J 2N1

EMERGENCY TELEPHONE NUMBER: (613) 996-6666 EMERGENCY TELEPHONE NUMBER: (613) 996-6666 Non-Office Hours, Weekends, or Holidays - (CANUTEC) Call Collect Non-Office Hours, Weekends, or Holidays - (CANUTEC) Call Collect

CHEMICAL FAMILY CHEMICAL FORMULA CHEMICAL NAME

Sodium Hyphochlorite Solution Chlorinated Alkali Not Applicable

MOLECULAR WEIGHT TRADE NAME AND SYNONYMS MATERIAL USE WHMIS CLASS

Not Applicable Various Sanitizing/Bleaching E D2B

SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

HAZARDOUS INGREDIENTS	APPROXIMATE CONCENTRATION %	C.A.S.N.A.	"EXPOSURE LIMITS"	LD50/LC50 SPECIFY SPECIES & ROUTE
Sodium Hypochlorite 12 % Solution	60 – 100	7681-52-9	STEL (ACGIH) 1 ppm for chlorine	LD50 4445 mg/kg (oral/rat)

SECTION III - PHYSICAL DATA FOR MATERIAL

PHYSICAL STATE ODOUR AND APPEARANCE ODOUR THRESHOLD SPECIFIC GRAVITY Yellow liquid with characteristic odour GAS LIQUID X SOLID Not Available 1.18

VAPOUR DENSITY (Air=1) VAPOUR PRESSURE (mm) **EVAPORATION RATE BOILING POINT (°C)**

17.5 mm Hg at 20°C Not Available 105°C Not Available SOLUBILITY IN WATER FREEZING POINT (°C) % VOLATILE (by volume) Hα -25°C Complete 85% 12.0

COEFFICIENT OF WATER/OIL DISTRIBUTION: Not Available

SECTION IV - FIRE AND EXPLOSION DATA

FLAMMABILITY IF YES, UNDER WHAT CONDITIONS

YES NO X

MEANS OF EXTINCTION: Water, dry chemical, carbon dioxide, foam

SPECIAL PROCEDURES: Fire fighters should wear self-contained breathing apparatus and full protective clothing. FLASHPOINT (°C) AND METHOD: Not Applicable **AUTO IGNITION TEMPERATURE** (°C): Not Applicable

UPPER EXPLOSION LIMIT (% BY VOLUME): Not Applicable LOWER EXPLOSION LIMIT (% BY VOLUME): Not Applicable

HAZARDOUS COMBUSTION PRODUCTS: Chlorine gas

EXPLOSION DATA SENSITIVITY TO MECHANICAL IMPACT: Not Applicable

RATE OF BURNING **EXPLOSIVE POWER** SENSITIVITY TO STATIC DISCHARGE

Not Applicable Not Applicable Not Applicable

SECTION V - REACTIVITY DATA

CHEMICAL STABILITY IF NO. UNDER WHAT CONDITIONS?

YES NO X Decomposes slowly. Do not expose to temperatures above 40°C (104°F), sunlight or metals.

INCOMPATIBLILTY TO OTHER SUBSTANCES IF SO, WHICH ONES?

YES X Urea, ammonia, acids, reducing agents, oxidizable materials, organic

matter, heavy metals.

REACTIVITY AND UNDER WHAT CONDITIONS: High temperatures will cause faster decomposition and liberation of

> chlorine gas. Metallic contamination will also cause liberation of oxygen gas. Contamination with ammonia and urea will liberate nitrogen gas and chloramines. Contact with oxidizable materials

produces heat which may generate chlorine gas.

HAZARDOUS DECOMPOSITION PRODUCTS: See above. **MATERIAL NAME: Q 1000**

SECTION VI – TOXICOLOGICAL PROPERTIES OF PRODUCT

ROUTE OF ENTRY

SKIN CONTACT: X SKIN ABSORPTION: EYE CONTACT: X INHALATION ACUTE: X INHALATION CHRONIC: X INGESTION: X

EFFECTS OF ACUTE EXPOSURE TO PRODUCT

EYE: CORROSIVE. May cause permanent damage if not treated promptly.

SKIN: CORROSIVE. May cause irritation. May cause permanent damage if not treated promptly.

INHALATION: Breathing mist, spray or vapour may cause severe irritation of the respiratory tract.

INGESTION: CORROSIVE. May cause severe irritation to digestive tract. May lead to convulsion, coma or death.

EFFECTS OF CHRONIC EXPOSURE TO PRODUCT: None Known

LD50 OF PRODUCT (SPECIFY SPECIES & ROUTE) IRRITANCY OF PRODUCT EXPOSURE LIMITS OF PRODUCT

Not Available Moderate Not Available

LC50 OF PRODUCT (SPECIFY SPECIES) SENSITIZATION TO PRODUCT SYNERGISTIC MATERIALS

Not Available Not Available Not Applicable

CARCINOGENICITY REPRODUCTIVE EFFECTS TERATOGENICITY MUTAGENICITY

Not Established Not Available Not Available Not Available

SECTION VII – PREVENTATIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT

GLOVES RESPIRATORY (SPECIFY) EYE (SPECIFY)
Rubber As required Chemical Goggles

FOOTWEAR (SPECIFY)
Rubber

CLOTHING (SPECIFY)
Cover Skin

OTHER (SPECIFY)
Impermeable Apron

ENGINEERING CONTROLS (E.G. VENTILATION, ENCLOSED PROCESS, (SPECIFY): Local mechanical exhaust.

LEAK AND SPILL PROCEDURE: Contain the spill. Do not allow spilled product to go to drain. Neutralize

with sodium sulphite, sodium bisulphite or dilute hydrogen peroxide. Mop up or soak up with absorbent clay for disposal. Flush spill area with large volumes

of water.

WASTE DISPOSAL: Dispose of according to local, provincial, and federal regulations.

HANDLING PROCEDURES & EQUIPMENT: Avoid contact with skin, eyes, and clothing. Avoid contact with combustibles

and metals.

STORAGE REQUIREMENTS: Store in a cool, dry, well-ventilated place in a closed container.

SPECIAL SHIPPING INFORMATION: Not Applicable.

SECTION VIII - FIRST AID PROCEDURES

SKIN: Wash with soap and water. If irritation persists, seek medical attention.

EYE: Immediately flush eyes with water for at least 15 minutes. Seek medical attention immediately.

INHALATION: Remove patient to fresh air. If breathing difficulty appears, seek medical attention.

INGESTION: DO NOT induce vomiting. Give lots of water or milk. Do not give anything by mouth to an unconscious

patient. Seek medical attention immediately.

GENERAL ADVICE: Safety shower and eye wash should be readily available.

SECTION IX – PREPARATION DATE OF MSDS

ADDITIONAL INFORMATION/COMMENTS: None

SOURCES USED: Supplier MSDS

PREPARED BY: CP INDUSTRIES LTD. PHONE NUMBER: (519) 843-6300 DATE: March 24, 2004