

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT IDENTIFICATION AND USE

PRODUCT IDENTIFIER → DÜRR SYSTEM-HYGIENE OROTOL PLUS Disinfection of suction systems		PRODUCT IDENTIFICATION NUMBER (PIN) OROTOL PLUS	
PRODUCT USE → Concentrate for the simultaneous disinfection and cleaning, deodorization and care of dental suction systems.			
MANUFACTURER'S NAME orochemie GmbH + Co KG		SUPPLIER'S NAME SciCan / Division of Lux & Zwingenberger Ltd.	
STREET ADDRESS Max-Planck-Str. 27		STREET ADDRESS 1440 Don Mills Road	
CITY D - 70806 Kornwestheim	PROVINCE	CITY Toronto	PROVINCE Ontario
POSTAL CODE D - 70806	EMERGENCY TELEPHONE NO. 0049 7154 13080	POSTAL CODE Canada M3B 3P9	EMERGENCY TELEPHONE NO. (416) 445 - 1600

SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	%	CAS NUMBER	LD ₅₀ OF INGREDIENT (SPECIFY SPECIES AND ROUTE)	LD ₅₀ OF INGREDIENT (SPECIFY SPECIES)
N,N-Dimethyl-N,N-dioctyl-ammonium chloride	1 - 5	5538-94-3	1025 mg/kg (mouse, oral)	
N-Benzyl-N,N-dimethyl-N-dodecyl-ammonium chloride	< 1	68424-85-1	500 - 2000 mg/kg (rat, oral)	
Na ₄ -Ethylenediaminetetraacetate	1 - 5	64-02-8	> 2000 mg/kg (rat, oral)	

SECTION 3 - PHYSICAL DATA

PHYSICAL STATE liquid	ODOUR AND APPEARANCE yellow liquid wth aromatic odour			ODOUR THRESHOLD (ppm) not applicable
VAPOUR PRESSURE (mm Hg) like water	VAPOUR DENSITY (AIR = 1) ≈ 1	EVAPORATION RATE > 1 (like water)	BOILING POINT (° C) ≈ 100 °C	FREEZING POINT (° C) no data available
pH 10.5 ± 0.5 (20 g/l H ₂ O)	SPECIFIC GRAVITY 1.04 ± 0.02 g/cm ³	COEFF. WATER/OIL DIST. no data available		

SECTION 4 - FIRE AND EXPLOSION DATA

FLAMMABILITY YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IF YES, UNDER WHICH CONDITIONS ? →			
MEANS OF EXTINGUISHMENT water jet, powder or foam			
FLASHPOINT (° C) AND METHOD not applicable	UPPER FLAMMABLE LIMIT (% BY VOLUME) not applicable	LOWER FLAMMABLE LIMIT (% BY VOLUME) not applicable	
AUTOIGNITION TEMPERATURE (° C) not applicable	HAZARDOUS COMBUSTION PRODUCTS not known		
EXPLOSION DATA →	SENSITIVITY TO IMPACT not applicable	SENSITIVITY TO STATIC DISCHARGE not applicable	

SECTION 5 - REACTIVITY DATA

CHEMICAL STABILITY YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF YES, UNDER WHICH CONDITIONS ? → normal storage and handling	
INCOMPATIBILITY WITH OTHER SUBSTANCES YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IF SO, WHICH ONES ? → none	
REACTIVITY, AND UNDER WHAT CONDITIONS none	
HAZARDOUS DECOMPOSITION PRODUCTS No known hazardous decomposition products.	

PRODUCT IDENTIFIER → **DÜRR SYSTEM-HYGIENE OROTOL PLUS Disinfection of suction systems**

SECTION 6 - TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY

SKIN CONTACT SKIN ABSORPTION EYE CONTACT INHALATION INGESTION

EFFECTS OF ACUTE EXPOSURE TO PRODUCT
Irritating. LD50 (rat, oral) is > 5 ml/kg of body weight.

EFFECTS OF CHRONIC EXPOSURE TO PRODUCT
not known

EXPOSURE LIMITS not known	IRRITANCY OF PRODUCT Irritating to eyes and skin.	SENSITIZATION TO PRODUCT not applicable	CARCINOGENICITY not applicable
TERATOGENICITY not applicable	REPRODUCTIVE TOXICITY not applicable	MUTAGENICITY not applicable	SYNERGISTIC PRODUCTS not applicable

SECTION 7 - PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT

GLOVES (SPECIFY) protective gloves (e.g. rubber gloves)	RESPIRATOR (SPECIFY) if ventilation is inadequate	EYE (SPECIFY) protective goggles
FOOTWEAR (SPECIFY) -	CLOTHING (SPECIFY) -	OTHER (SPECIFY) Keep away from food and drink.

ENGINEERING CONTROLS (SPECIFY, EG. VENTILATION, ENCLOSED PROCESS)
Open and handle container with care.

LEAK AND SPILL PROCEDUR
Remove with fluid-absorbing material (e.g. universal absorbent). The cleaned-up material must be correctly disposed of. Residues should be flushed off with care.

WASTE DISPOSAL
Disinfectant: dispose of in conformity with the valid waste disposal regulations. Empty packages completely. After appropriate cleaning they can be recycled. Rinse with water for recycling.

HANDLING PROCEDURES AND EQUIPMENT
Please observe instructions for use (see bottle back label). Keep stock bottle tightly shut and reseal carefully after use.

STORAGE REQUIREMENTS
Store only in the original container. Store in a cool place. Do not store in temperatures below 5 °C.

SPECIAL SHIPPING INFORMATION
No dangerous goods as defined by the transport regulations.

SECTION 8 - FIRST AID MEASURES

SPECIFIC MEASURES

General instructions: Remove contaminated clothing.
Inhalation: Take care for fresh air.
Skin contact: After contact with skin, wash immediately with plenty of water.
Eye contact: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Ingestion: Rinse the mouth and then drink plenty of water. Seek medical advice.

SECTION 9 - PREPARATION DATE OF MSDS

PREPARED BY (GROUP, DEPARTMENT, ETC.) Customer Service	PHONE NUMBER 416 446-2705	DATE June 15, 2009
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