

MATERIAL SAFETY DATA SHEET

Centrego Toucan Systems

1. PRODUCT & COMPANY IDENTIFICATION

Product Name	Toucan ECA Systems
General Use	Biocide and Cleaner. Destroys bacteria, spores, viruses and algae.
Product Formulation Name	Toucan
Chemical Family	<i>Hypochlorite. Mixed oxidant solution</i>

Note: Toucan generated by Toucan-ECO II, Toucan III, Toucan Mini, Toucan Active and Toucan Active Plus contains active chlorine compounds such as HOCL and ClO⁻ in the range of 30-1300 ppm (0.03-1.30%). The active compounds vary with the amount of salt (NaCl) added to the water during the generation process and the activation cycles. The resulting solution also contains various chlor-oxygen species that are short-lived when presented with oxidant-demanding substances. The average/standard amount of active chlorine is 50 to 100 ppm.

2. MANUFACTURER

Name	Centrego Ltd
Address	Unit 2 Marshall Way, Commerce Park, Frome, Somerset, BA11 2FB, United Kingdom

3. DISTRIBUTOR

Name	Centrego Ltd.
Address	Unit 2 Marshall Way, Commerce Park, Frome, Somerset, BA11 2FB, United Kingdom

4. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt %	CAS #
Hypochlorous Acid (HOCL)	0.03 -1.30	7790-92-3
Sodium chloride (NaCl)	0.42 – 0.836	7647-14-5
Water	99.578 - 99.577	7732-18-5

5. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW	
Physical Appearance	Colorless, liquid with a faint odour. Appears as clear water.
Immediate Concerns	No hazard expected under normal conditions of use.

6. FIRST AID MEASURES

Overview	In highly concentrated form (C.active >1.200mg/l) Toucan may cause slight irritation to the eyes, sensitive skin and throat. When the solution is stored in bottles, avoid inhaling the vapors. In normal operation the Toucan products produce solutions well below C.active >1.200mg/l however care should still be taken to avoid inhaling the vapors.
EYES	In the strongest form may cause slight irritation to eyes. Immediately flush eyes with plenty of water for several minutes. Seek medical attention if irritation persists.
SKIN	In the strongest form may cause slight irritation to sensitive skin or open wounds. Remove contaminated clothing including shoes and immediately drench affected skin with plenty of water.
INGESTION	Swallowing of the solution in its strongest form may cause slight irritation to a throat and digestive tract. Do not induce vomiting. Give plenty of water to drink. Seek medical attention if ill effects occur.
INHALATION	During generation of the solutions, particularly its strong form, unless there is adequate ventilation, there may be a build-up of fumes that may cause dizziness and nausea. Remove from further exposure. Seek medical attention if ill effects occur.

7. FIRE FIGHTING MEASURES

There are no special requirements for Toucan.	Not flammable.
Flammable Limits	Not Available
Flammable Class	Non Flammable
Flame Propagation Or Burning Rate Of Solids	Not Available
General Hazard	Evacuate Personnel downwind of fire to avoid inhalation of irritating and/or harmful fumes and smoke.
Extinguishing Media	Chemical Type Foam, Powder, Sand, Water Spray.
Hazardous Combustion Products	Oxides of chlorine.
Fire Fighting Procedures	This product is a NON-flammable substance. However, hazardous decomposition and combustion products may be formed in a fire situation. Cool exposed containers with water spray to prevent overheating.
Sensitive To Static Discharge	Not Available
Sensitivity To Impact	Not Available

8. ACCIDENTAL RELEASE MEASURES

SPILLAGES	Wash to waste with plenty of water.
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9. HANDLING & STORAGE

HANDLING	No special precautions necessary.
STORAGE	Storage in shady area with sealed container between 5 and 40°C.

10. EXPOSURE CONTROLS / PERSONAL PROTECTION

<p>Avoid prolonged contact with the skin. Use good personal hygiene practices. No PEL's, TLV's or OEL's for this; product or its ingredient are listed in the current issue of ACGIH's Guide to Occupational. Exposure Values have not been determined by the manufacturer.</p>

11. PHYSICAL AND CHEMICAL PROPERTIES

Physical STATE	Liquid
Odor:	Odorless
Appearance	Clear Liquid
Color	Colorless
Ph	7 (Neutral) up to 8.7
Vapor Pressure	Not Available
Vapor Density	Not Available
Boiling Point	Not Available
Freeing Point	Not Available
Melting Point	68°C (154.4°F)
Solubility In Water	Soluble
Density	0.9 g/ml at 20°C (68°F)
Viscosity	Not Available
Molecular Formula	Not Available
Molecular Weight	Not Available
Coeff. Oil/Water	Not Available

12. STABILITY & REACTIVITY

Stable	YES
Hazardous Polymerization	No
Conditions To Avoid	Heat
Stability	This product is stable under Normal ambient conditions of temperature and pressure. (Room Temperature)
Polymerization	Will not occur
Hazardous Decomposition Products	Oxides of chlorine; amine vapours

13. TOXICOLOGICAL INFORMATION

ACUTE	
DERMAL LD50	> 5000 mg/kg
ORAL LD50	> 5000 mg/kg
INHALATION LC50	Not Available
EYE EFFECTS	Negative
SKIN EFFECTS	Negative
SENSITIZATION	Negative
MUTAGENICITY	Negative
REPRODUCTIVE EFFECTS	Not Available
TERATOGENIC EFFECTS	Not Available

14. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA	Presents no hazard to the environment.
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15. DISPOSAL CONSIDERATIONS

No special precautions are required for this product.

16. TRANSPORT INFORMATION

Not Applicable.

17. REGULATORY INFORMATION

UNITED STATES	
HOCL	FDA Material Clearance No.178.1010
CANADA	Not available
EUROPEAN COMMUNITY (EU)	
EEC LABEL SYMBOL AND CLASSIFICATION	No S or R Phrases assigned.
CE	Available with Generator
EUROPEAN COMMUNITY REGULATORY	All intentional ingredients are listed on the European's EINECS Inventory.
STATE REGULATIONS	Not Available
LOCAL REGULATIONS	Not Available

The information in this document meets the European requirements for safety and health measurements (91/155/EWG)

Note:

- The information contained in this document is based on the data considered to be accurate at the time of publication and is given free of charge. It is representative for typical product but batches may exhibit minor variations.
- NO warranty is expressed or implied concerning the accuracy of this data.
- In case of doubt or for clarification contact Centrego Ltd.
- Neither Centrego Ltd or RT ECA Tech Ltd are able to anticipate all conditions under which the product may be used. Users are therefore advised to carry out an assessment of workplace risk and carry out their own tests to determine Safety and Suitability for the process and conditions of use.
- This information is intended for use in the EC-countries only as different limits may be set in other countries. Please check your Local and National Authorities or Supplier. (91/155/EWG)

Always use as directed.

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