

PRODUCT SAFETY DATA SHEET

PRODUCT: RL7

SECTION 1: IDENTIFICATION	
PRODUCT NAME	Marine Safety Light Systems RL7
MANUFACTURERS NAME	DANIAMANT LIMITED
ADDRESS TELEPHONE NO. FAX NO.	Unit 3, The Admiral Park, Airport Service Road, Portsmouth, Hants. PO3 5RQ UK +44 (0) 23 9267 5100 (Switchboard) +44 (0) 23 9267 5101 (Fax)
EMERGENCY NOS.	FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE EXPOSURE OR ACCIDENT CALL CHEMTREC DAY OR NIGHT: 00 1 703 527 3887 (SHIPMENT TO AND FROM USA) (CHEMTREC OFFICE) 800 424 9300 (INTERNAL N. AMERICA MOVEMENTS) (CHEMTREC OFFICE) D806 CHEMTREC COMPANY CODE 205617 COMPANY NUMBER
DESCRIPTION	Marine safety light systems, powered by primary Alkaline batteries, designed to be stored for up to five years before use. The battery cells are primary Zinc/Manganese dioxide and as supplied these chemicals are hermetically sealed in a steel can. In this state the units constitute no definable hazard to health. However, through disassembly, mechanical or electrical abuse or exposure of the battery cell to heat, caustic ingredients may be exposed.

SECTION 2: INFORMATION OF INGREDIENTS

HAZARDOUS COMPONENTS:

	CAS NUMBER	EC Number	Amount		
Polycarbonate (PC)	25037-45-0	920-874-5	25%		
Manganese Dioxide (MnO ₂)	1313-13-9	215-202-6	12 – 30%		
Iron (Fe)	7439-89-6	231-096-4	10 – 18%		
Zinc (Zn)	7440-66-6	231-175-3	6 – 15%		
Potassium Hydroxide (KOH)	1310-58-3	215-181-3	1.2 – 5.4%		
Graphite	7782-42-5	231-955-3	1.2 – 3.6%		
Barium Sulfate (BaSO ₄)	7727-43-7	231-784-4	<3%		
Brass (CuPbZn)	12597-71-6	603-111-8	<1.5%		
Sodium Hydroxide (NaOH)	1310-73-2	215-185-5	<0.25%		
Nickel (Ni)	7440-02-0	231-111-4	<0.2%		
Lead (Pb)	7439-92-1	231-100-4	<0.15%		
Cadmium (Cd)	7440-43-9	231-152-8	<0.015%		
Mercury (Hg)	7439-97-6	231-106-7	<0.0003%		
Arsenic (As)	7440-38-2	231-148-6	<0.00006%		

Reference: Sax's dangerous properties of industrial materials.

NOTE: This product does not contain asbestos.

SECTION 3: HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

CAUTION: Batteries can explode or leak if heated, disassembled, shorted, recharged, exposed to fire or high temperatures. Keep product in original package until ready to use. Do not carry batteries loose in your pocket or purse. Keep product away from children. Under certain misuse conditions and by abusively opening the product and battery, flammable and corrosive materials may be released.

Potential Health Effects:	The chemicals in this product are contained in a sealed can. Exposure to the contents will not occur unless the battery leaks, is exposed to high temperatures or is mechanically, physically, or electrically abused. Contact with battery contents may cause severe irritation.
Eye Contact:	Exposure to the electrolyte contained within the battery may result in severe irritation and chemical burns.
Skin Contact:	Exposure to the electrolyte contained within the battery may result in chemical burns.
Inhalation:	Inhalation of vapours or fumes released due to heat or a large number of leaking batteries may cause respiratory and eye irritation. High concentration may cause central nervous system effects including headache, dizziness and nausea.
Ingestion:	Swallowing is not anticipated due to battery size. Irritation to the internal/external mouth areas may occur following exposure to a leaking battery.

SECTION 4: FIRST AID MEASURES

EYE CONTACT:	If battery is leaking and material contacts the eye, flush thoroughly with copious amounts of running water for at least 15 minutes. Seek immediate medical attention.
SKIN CONTACT:	If battery is leaking and material contacts the skin, remove any contaminated clothing, and wash exposed skin thoroughly with soap and running water. Flush with running water for at least 15 minutes. If irritation, injury, or pain persists seek medical attention.
INHALED:	If battery is leaking, contents may be irritating to respiratory passages. Move to fresh air. If irritation persists, seek medical attention.
SWALLOWED:	Not anticipated due to size of batteries. If exposed to a leaking battery, rinse mouth and surrounding areas with running water for at least 15 minutes. Give plenty of water to drink. Do not induce vomiting. seek medical attention.
NOTE TO PHYSICIAN:	The primary acutely toxic ingredient is concentrated (35%) potassium hydroxide. Anticipated potential leakage of potassium hydroxide is 1 to 8 ml, depending on quantity of batteries affected. Other materials are either inert or have low hazard associated with their exposure

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media:	As appropriate for adjacent fire.
Special Fire Fighting Procedures:	In fires involving large quantities of product, use self-contained breathing apparatus and full protective clothing.
Further information:	Hazardous decomposition products may be produced.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Notify safety personnel of large spills. Caustic potassium hydroxide may be released from leaking or ruptured batteries. Avoid eye or skin contact and inhalation of vapours. Increase ventilation. Clean up personnel should wear appropriate protective gear.
Environmental Precautions:	Not applicable.
Methods for cleaning up:	Not applicable.

SECTION 7: HANDLING AND STORAGE

Handle and store in cool, well-ventilated area. Keep out of direct sunlight and away from heat sources. Do not tamper with or attempt to open sealed housing. Batteries are permanently installed by design and replacement is not permissible under any circumstances. Batteries may explode, pyrolyze or vent if disassembled, crushed, recharged or exposed to high temperatures. Do not carry batteries loose in pocket or bag.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

External corrosion of the Nickel-plated battery can and tags could result in the formation of toxic metal salts. Avoid ingestion. Observe personal hygiene. Wash hands after contact. Use neoprene, rubber or nitrile gloves and safety glasses when handling leaking batteries.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Light in a plastic housing.
STABILITY IN WATER	Product is waterproof.
REACTION WITH WATER	Only if damaged.
FLASH POINT	Not applicable unless individual components exposed.
FLAMMABILITY	Not applicable unless individual components exposed.
RELATIVE DENSITY	Not applicable unless individual components exposed.
SOLUBILITY IN WATER	Not applicable unless individual components exposed.
SOLUBILITY OTHER	Not applicable unless individual components exposed.

SECTION 10: STABILITY AND REACTIVITY

Hazardous materials are housed within a hermetically sealed unit, under normal conditions this unit is Non-Hazardous.

STABILITY	This product is stable.
INCOMPATIBILITY/CONDITIONS TO AVOID	Contents are incompatible with strong oxidizing agents and acids. Do not heat, crush, disassemble, short circuit or recharge.
HAZARDOUS DECOMPOSITION PRODUCTS:	Thermal degradation may produce hazardous fumes of zinc and manganese; hydrogen gas; caustic vapours of potassium hydroxide and other toxic by-products.
HAZARDOUS POLYMERIZATION:	Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

NONE, unless battery ruptures, then see Section 2.

SECTION 12: ECOLOGICAL INFORMATION

MAMMALIAN EFFECTS	None known if used / disposed of correctly
ECO-TOXICITY	None known if used / disposed of correctly
BIOACCUMULATION POTENTIAL	None known if used / disposed of correctly
ENVIRONMENTAL FATE	None known if used / disposed of correctly

SECTION 13: DISPOSAL

DISPOSAL	Dispose in accordance with appropriate regulations. DO NOT INCINERATE, since batteries may explode at excessive temperatures. DO NOT ATTEMPT TO DISMANTLE THIS PRODUCT
-----------------	--

SECTION 14: TRANSPORT INFORMATION

UN Hazard Code	Not applicable.
UN Number	Not applicable.
UN Proper Shipping Name	Not applicable.
Other information for air transport (IATA)	Not restricted as per special provision A123 must be marked on the AWB (8.2.6.1)
Total Battery Weight	184g (Weight of Individual Cell 23g)

SECTION 15: REGULATORY INFORMATION

Classification	Not controlled under ADNR (Europe)
Hazard Symbol	None
Risk Phrases	This product is not classified according to the EU regulations.

SECTION 16: OTHER INFORMATION

Disclaimer	The above information is given based on the present state of our knowledge of this product and is, to the best of our knowledge and belief, accurate at the time of publication. No warranty given, either express or implied, with respect to the accuracy, reliability or completeness of the information contained herein and we will assume no liability resulting from its use. The users must satisfy themselves that the information provided is entirely suitable for their particular use.
-------------------	---

21 September 2020