

MATERIAL SAFETY DATA SHEET

1. Identification

Product name alkaline primary battery Type LR20, LR14, LR6, LR03, 6LR61 Manufacturer's name
GACELL A/S, Sletten 17, DK 7500

2. Ingredients

Ingredient name Cas# 1. Manganese dioxide 2. Zinc 3. Potassium hydroxide 4. Zinc oxide 5.
Graphite

7782-42-5 6. Steel

7439-89-6

3. Physical and chemical characteristics.

Boiling point NA Vapor pressure (mmHg) NA Vapor density NA Specific gravity NA Melting point NA
Evaporation rate (Butyl acetate =1) NA Solubility in water NA Appearance Encased cylindrical or
rectangular shape

4, Fire and explosion hazard data.

Flash point (Method used) NA Flammable limits LEL: NA UEL: NA Extinguishing media Dry powder,
carbon dioxide, foam, dry sand Special fire fighting procedures Fire fighters should wear self-contained
breathing

apparatus when any fire. Unusual fire and explosion hazards Cells exposed to excessive heat, may cause
electrolyte leakage or explosion

% 1313-13-9

25~45 7440-66-6

10~20 1310-58-3

3~9 1314-13-2

0~1 1~4 10~30

BBL: 330-0196400-29 KBC:451-2508001-04 Visit us at our web site : www.panasonic-batteries.be

Fortis: 235-0073000-68 Artesia Bank: 552-3191400-51



5. Reactivity Data.

Stability Stable Incompatibility (materials to avoid) NA Hazardous decomposition of BY-products Oxides or fumes of Mn , Zn Hazardous polymerization will not occur

6. Health hazard data.

Threshold limit value (TVL) and source NA Symptoms of exposure None, unless battery ruptures
Emergency first aid procedure If leakage from battery contacts the skin,

flush immediately with water If leakage enter eye,

flush immediately with copious quantities of water get medical attention for eyes

7. Precautions for safe handling and use.

Steps to be taken in case material is Avoid skin and eye contact released or spilled waste disposal
method Scientific evidence indicates that cells may be

disposed with household trash Never attempt to burn batteries in fire Dispose in accordance
with applicable regulations. Precautions to be taken in handling Store at room temperature and in dry
place. and string Transportation and shipment These are "Batteries dry" and are not considered

to be a "hazardous material" per U.S. DOT (department of transportation regulations) or a " dangerous
goods" per IATA (International Air Transport Association Regulations) Others Follow equipment
instructions to avoid leakage

or explosion. Do not short-circuit and reverse insertion of (+) , (-) Do not dismantle ,heat or
dispose in fire. Do not attempt to recharge. Do not overdischarge or mix use cells may cause
electrolyte leakage.

8. Control Measure

Respiratory protection (specific type) Self-contained breathing apparatus as any

fire situation Ventilation Local exhaust NA Mechanical (general) NA Specific NA Others NA Protective
gloves NA Eye protection NA Other protective clothing or equipment NA