

## KODAK ALKALINE BATTERIES

### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830  
Issue date: 2/16/2021 Version: 2.0

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form : Article  
Product name : KODAK ALKALINE BATTERY TYPES; ULTRA PREMIUM - AAA, AA, MAX Super Alkaline – AAAA, AAA, AA, C, D, 9V, 11A, 23A, 27A, N-LR1, 4LR44 28A, 357 (LR44/KA76); XTRALIFE - AAA, AA, C, D and 9V

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Main use category : Consumer use  
Industrial/Professional use spec : Industrial  
For professional use only  
Use of the substance/mixture : Alkaline batteries

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

Registered Address:  
Strand Europe Ltd, 3<sup>rd</sup> Floor  
207 Regent Street, London, W1B 3HH- United Kingdom  
T +44 (0) 1252 861000  
[sales@strandeurope.com](mailto:sales@strandeurope.com)

### 1.4. Emergency telephone number

Emergency number : For Hazardous Materials [or Dangerous Goods] Incident Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night 1-800-424-9300 / +1 703-527-3887

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable solids, Category 1	H228
Acute toxicity (oral), Category 4	H302
Acute toxicity (inhalation:dust,mist) Category 4	H332
Skin corrosion/irritation, Category 1, Sub-Category 1A	H314
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411
Full text of H statements : see section 16	

#### Adverse physicochemical, human health and environmental effects

No additional information available

### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



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Signal word (CLP)	: Danger
Contains	: manganese dioxide; potassium hydroxide; caustic potash
Hazard statements (CLP)	: H228 - Flammable solid. H302+H332 - Harmful if swallowed or if inhaled. H314 - Causes severe skin burns and eye damage. H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P240 - Ground and bond container and receiving equipment. P241 - Use explosion-proof electrical/ventilating/lighting equipment. P260 - Do not breathe dust/fume/gas/mist/vapours/spray. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product.

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
manganese dioxide substance with a Community workplace exposure limit	(CAS-No.) 1313-13-9 (EC-No.) 215-202-6 (EC Index-No.) 025-001-00-3 (REACH-no) 01-2119452801-43	20 – 60	Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Oral), H302
Zinc	(CAS-No.) 7440-66-6 (EC-No.) 231-175-3 (EC Index-No.) 030-001-01-9 (REACH-no) 01-2119467174-37-XXXX	10 – 40	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
potassium hydroxide; caustic potash substance with national workplace exposure limit(s) (GB)	(CAS-No.) 1310-58-3 (EC-No.) 215-181-3 (EC Index-No.) 019-002-00-8 (REACH-no) 01-2119487136-33-XXXX	1 – 20	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314
Graphite	(CAS-No.) 7782-42-5 (EC-No.) 231-955-3	1 – 10	Flam. Sol. 1, H228 Eye Irrit. 2, H319 STOT SE 3, H335

### Specific concentration limits:

Name	Product identifier	Specific concentration limits
potassium hydroxide; caustic potash	(CAS-No.) 1310-58-3 (EC-No.) 215-181-3 (EC Index-No.) 019-002-00-8 (REACH-no) 01-2119487136-33-XXXX	( 0.5 ≤C < 2) Eye Irrit. 2, H319 ( 0.5 ≤C < 2) Skin Irrit. 2, H315 ( 2 ≤C < 5) Skin Corr. 1B, H314 ( 5 ≤C < 100) Skin Corr. 1A, H314

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Full text of H-statements: see section 16

#### SECTION 4: First aid measures

##### 4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. Immediately call a POISON CENTRE or doctor/physician.
First-aid measures after skin contact	: Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTRE or doctor/physician.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE or doctor/physician.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER/doctor if you feel unwell. Immediately call a POISON CENTRE or doctor/physician.

##### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects	: Causes severe skin burns and eye damage.
Symptoms/effects after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled.
Symptoms/effects after skin contact	: Causes severe burns.
Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.

##### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

#### SECTION 5: Firefighting measures

##### 5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

##### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: Flammable solid.
Explosion hazard	: Heating may cause a fire or explosion.

##### 5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid fire-fighting water entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

#### SECTION 6: Accidental release measures

##### 6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.
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###### 6.1.1. For non-emergency personnel

Emergency procedures	: Evacuate unnecessary personnel.
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#### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.  
Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimise generation of dust. Store away from other materials.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.  
Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No open flames. No smoking. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact during pregnancy/while nursing.  
Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Comply with applicable regulations.  
Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use. Heat sources. Direct sunlight. Keep in fireproof place.  
Incompatible products : Strong bases. Strong acids.  
Incompatible materials : Sources of ignition. Direct sunlight.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

potassium hydroxide; caustic potash (1310-58-3)	
United Kingdom - Occupational Exposure Limits	
Local name	Potassium hydroxide
WEL STEL (OEL STEL)	2 mg/m <sup>3</sup>
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

#### 8.1.2. Recommended monitoring procedures

No additional information available

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#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

No additional information available

#### 8.2.2. Personal protection equipment

**Personal protective equipment:**

Avoid all unnecessary exposure.

**Personal protective equipment symbol(s):**



##### 8.2.2.1. Eye and face protection

<b>Eye protection:</b>			
Chemical goggles or face shield			
Type	Field of application	Characteristics	Standard
Safety glasses with side shields, Safety goggles		clear	EN 166

##### 8.2.2.2. Skin protection

<b>Hand protection:</b>					
Wear protective gloves.					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Polyvinylchloride (PVC)	3 (> 60 minutes)		1 (< 4.0)	EN ISO 374

##### 8.2.2.3. Respiratory protection

<b>Respiratory protection:</b>
In case of inadequate ventilation wear respiratory protection.

##### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

**Other information:**

Do not eat, drink or smoke during use.

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#### SECTION 9: Physical and chemical properties

##### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Colourless.
Odour	: Odourless.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable solid.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

##### 9.2. Other information

No additional information available

#### SECTION 10: Stability and reactivity

##### 10.1. Reactivity

Thermal decomposition generates : Corrosive vapours.

##### 10.2. Chemical stability

Stable under normal conditions. Flammable solid. May form flammable/explosive vapour-air mixture.

##### 10.3. Possibility of hazardous reactions

Not established.

##### 10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

##### 10.5. Incompatible materials

Strong acids. Strong bases.

##### 10.6. Hazardous decomposition products

None under normal conditions. Fume. Carbon monoxide. Carbon dioxide. May release flammable gases. Thermal decomposition generates : Corrosive vapours.

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#### SECTION 11: Toxicological information

##### 11.1 Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.  
 Acute toxicity (dermal) : Not classified  
 Acute toxicity (inhalation) : Harmful if inhaled.

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ATE CLP (oral)	908.843 mg/kg bodyweight
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ATE CLP (dust,mist)	3.75 mg/l/4h
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##### manganese dioxide (1313-13-9)

LD50 oral	> 2197 mg/kg bodyweight
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LD50 dermal	2000 mg/kg bodyweight
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LC50 Inhalation - Rat (Dust/Mist)	> 1500 mg/l
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##### Zinc (7440-66-6)

LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
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LC50 Inhalation - Rat	> 5.41 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
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##### potassium hydroxide; caustic potash (1310-58-3)

LD50 oral	333 mg/kg bodyweight
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Skin corrosion/irritation : Causes severe skin burns.  
 Serious eye damage/irritation : Assumed to cause serious eye damage  
 Respiratory or skin sensitisation : Not classified  
 Additional information : Based on available data, the classification criteria are not met  
 Germ cell mutagenicity : Not classified  
 Additional information : Based on available data, the classification criteria are not met  
 Carcinogenicity : Not classified  
 Additional information : Based on available data, the classification criteria are not met  
 Reproductive toxicity : Not classified  
 Additional information : Based on available data, the classification criteria are not met  
 STOT-single exposure : Not classified  
 Additional information : Based on available data, the classification criteria are not met

##### Graphite (7782-42-5)

STOT-single exposure	May cause respiratory irritation.
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STOT-repeated exposure : Not classified  
 Additional information : Based on available data, the classification criteria are not met

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#### Zinc (7440-66-6)

NOAEL (oral, rat, 90 days)	31.52 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
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Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Potential adverse human health effects and symptoms	: Harmful if swallowed, Harmful if inhaled.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - water	: Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Toxic to aquatic life with long lasting effects.

#### manganese dioxide (1313-13-9)

LC50 - Fish [1]	100 mg/l
EC50 - Other aquatic organisms [1]	100 mg/l waterflea

#### potassium hydroxide; caustic potash (1310-58-3)

LC50 - Fish [1]	80 mg/l
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### 12.2. Persistence and degradability

**KODAK ALKALINE BATTERY TYPES; ULTRA PREMIUM - AAA, AA, MAX Super Alkaline – AAAA, AAA, AA, C, D, 9V, 11A, 23A, 27A, N-LR1, 4LR44 28A, 357 (LR44/KA76); XTRALIFE - AAA, AA, C, D and 9V**

Persistence and degradability	May cause long-term adverse effects in the environment.
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### 12.3. Bioaccumulative potential

**KODAK ALKALINE BATTERY TYPES; ULTRA PREMIUM - AAA, AA, MAX Super Alkaline – AAAA, AAA, AA, C, D, 9V, 11A, 23A, 27A, N-LR1, 4LR44 28A, 357 (LR44/KA76); XTRALIFE - AAA, AA, C, D and 9V**

Bioaccumulative potential	Not established.
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#### potassium hydroxide; caustic potash (1310-58-3)

Partition coefficient n-octanol/water (Log Pow)	0.75
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### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

Additional information	: Avoid release to the environment.
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#### SECTION 13: Disposal considerations

##### 13.1. Waste treatment methods

- Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
- Additional information : Handle empty containers with care because residual vapours are flammable.
- Ecology - waste materials : Avoid release to the environment.

#### SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.2. UN proper shipping name</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

##### 14.6. Special precautions for user

###### Overland transport

Not applicable

###### Transport by sea

Not applicable

###### Air transport

- PCA Excepted quantities (IATA) : 0
- PCA Limited quantities (IATA) : 0
- PCA limited quantity max net quantity (IATA) : 0
- PCA packing instructions (IATA) : 0
- PCA max net quantity (IATA) : 0
- CAO packing instructions (IATA) : See A123
- CAO max net quantity (IATA) : 0
- Special provisions (IATA) : SP 123, SP130, A123
- Properties and observations (IATA) : These batteries are not subjected to DGR Regulations provided they meet packing requirements of IATA/ICAO SP 123 and SP 130 of the DOT. NOTE: The words "NOT RESTRICTED" and "SPECIAL PROVISION A123" must be included on the description in the Air Waybill.

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#### Inland waterway transport

Not applicable

#### Rail transport

Not applicable

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

Contains no substance on the REACH candidate list

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

### Full text of H- and EUH-statements:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Sol. 1	Flammable solids, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H228	Flammable solid.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.

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H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.