

KODAK Products

KODAK MAX Lithium AAA/ AA

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Issue date: 5/13/2021 Version: 2.0

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

1.1. Product identifier

Product form : Mixture
Product name : KODAK MAX Lithium AA / AAA KAAFR / K3AFR

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 : 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, 3rd Floor
207 Regent Street, London, W1B 3HH- United Kingdom
T +44 (0) 1252 861000
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
Skin corrosion/irritation, Category 1, Sub-Category 1B	H314
Reproductive toxicity, Category 1B	H360
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335
Specific target organ toxicity — Repeated exposure, Category 2	H373

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) :



GHS02

GHS05

GHS07

GHS08

Signal word (CLP) :

Danger

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Contains	: Iron Disulfide; lithium; Carbon black; 1,2-dimethoxyethane; ethylene glycol dimethyl ether; EGDME
Hazard statements (CLP)	: H228 - Flammable solid. H314 - Causes severe skin burns and eye damage. H335 - May cause respiratory irritation. H360 - May damage fertility or the unborn child. H373 - May cause damage to organs through prolonged or repeated exposure.
Precautionary statements (CLP)	: P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. 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.

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]
Iron Disulfide	CAS-No.: 1309-36-0	10 – 60	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Lithium Or Lithium Alloy	-	1 – 20	Water-react. 1, H260 Skin Corr. 1, H314
Lithium	CAS-No.: 7439-93-2 EC-No.: 231-102-5 EC Index-No.: 003-001-00-4	1 – 10	Water-react. 1, H260 Skin Corr. 1B, H314
Carbon black substance with national workplace exposure limit(s) (GB)	CAS-No.: 1333-86-4 EC-No.: 215-609-9 REACH-no: 01-2119384822-32-XXXX	1 – 10	STOT RE 1, H372
1,2-dimethoxyethane; ethylene glycol dimethyl ether; EGDME substance listed as REACH Candidate (1,2- dimethoxyethane; ethylene glycol dimethyl ether (EGDME))	CAS-No.: 110-71-4 EC-No.: 203-794-9 EC Index-No.: 603-031-00-3	1 – 10	Flam. Liq. 2, H225 Repr. 1B, H360FD Acute Tox. 4 (Inhalation), H332
Graphite	CAS-No.: 7782-42-5 EC-No.: 231-955-3	1 – 10	Eye Irrit. 2, H319 STOT SE 3, H335

Full text of H- and EUH-statements: see section 16

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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 exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTRE or doctor/physician. Call a POISON CENTER/doctor if you feel unwell.
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. Immediately call a POISON CENTRE or doctor/physician.

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

Symptoms/effects	: This product is not expected to cause a hazard however if the casing splits then the liquid contents may cause a skin reaction. This product is not expected to cause a hazard however if the casing splits then the contents may cause a hazard.
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes severe burns.
Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects after ingestion	: Ingestion may cause nausea, vomiting and diarrhea. 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	: Dry powder. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Heating may cause a fire or explosion.
Explosion hazard	: Heating may cause a fire or explosion.
Reactivity in case of fire	: Under fire conditions closed containers may rupture or explode.
Hazardous decomposition products in case of fire	: oxides of lithium. lithium hydroxide fumes. sulfur dioxide gas. Carbon oxides.

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	: Evacuate unnecessary personnel.
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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 : Evacuate unnecessary personnel. Stop leak if safe to do so. Mark out the contaminated area with signs and prevent access to unauthorized personnel.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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

- 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. Do not breathe dust/fume/gas/mist/vapours/spray. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area.
- Hygiene measures : Wash hands, forearms and face thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Comply with applicable regulations.
- Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container tightly closed.
- Incompatible products : Strong bases. Strong acids.
- Incompatible materials : 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

Carbon black (1333-86-4)	
United Kingdom - Occupational Exposure Limits	
Local name	Carbon black
WEL TWA (OEL TWA) [1]	3.5 mg/m ³
WEL STEL (OEL STEL)	7 mg/m ³
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

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8.1.2. Recommended monitoring procedures

No additional information available

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

Eye protection:

Chemical goggles or face shield

Eye protection			
Type	Field of application	Characteristics	Standard
Safety goggles		Clear	EN 166

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Wear protective gloves.

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Polyvinylchloride (PVC)				EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

In case of inadequate ventilation wear respiratory protection.

8.2.2.4. Thermal hazards

No additional information available

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8.2.3. Environmental exposure controls

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: No data available
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)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
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.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

No additional information available

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10.6. Hazardous decomposition products

Fume. Carbon monoxide. Carbon dioxide. Thermal decomposition generates : Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
 Acute toxicity (dermal) : Not classified
 Acute toxicity (inhalation) : Not classified

Carbon black (1333-86-4)

LD50 oral rat	> 8000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
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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

Carbon black (1333-86-4)

IARC group	2B - Possibly carcinogenic to humans
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Reproductive toxicity : May damage fertility or the unborn child.
 STOT-single exposure : May cause respiratory irritation.

Iron Disulfide (1309-36-0)

STOT-single exposure	May cause respiratory irritation.
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Graphite (7782-42-5)

STOT-single exposure	May cause respiratory irritation.
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STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Carbon black (1333-86-4)

LOAEC (inhalation, rat,dust/mist/fume, 90 days)	0.0071 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
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NOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.0011 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
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STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
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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 : Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

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Hazardous to the aquatic environment, long-term (chronic) : Not classified

Carbon black (1333-86-4)

EC50 72h - Algae [1]	> 10000 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
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lithium (7439-93-2)

LC50 - Fish [1]	109 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
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LC50 - Fish [2]	18 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
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LOEC (chronic)	2.53 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
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NOEC (chronic)	1.7 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
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12.2. Persistence and degradability

KODAK MAX Lithium AA / AAA KAAFR / K3AFR

Persistence and degradability	Not established.
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12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Component

1,2-dimethoxyethane; ethylene glycol dimethyl ether; EGDME (110-71-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
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12.6. Other adverse effects

Additional information : Avoid release to the environment.

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.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

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

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ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 3090	UN 3090	UN 3090	UN 3090	UN 3090
14.2. UN proper shipping name				
LITHIUM METAL BATTERIES	LITHIUM METAL BATTERIES	Lithium metal batteries	LITHIUM METAL BATTERIES	LITHIUM METAL BATTERIES
Transport document description (ADR)				
UN 3090 LITHIUM METAL BATTERIES, 9A, (E)	UN 3090 LITHIUM METAL BATTERIES, 9	UN 3090 Lithium metal batteries, 9A	UN 3090 LITHIUM METAL BATTERIES, 9A	UN 3090 LITHIUM METAL BATTERIES, 9A
14.3. Transport hazard class(es)				
9A	9	9A	9A	9A
				
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: M4
Special provisions (ADR)	: 188, 230, 310, 376, 377, 387, 636
Limited quantities (ADR)	: 0
Excepted quantities (ADR)	: E0
Packing instructions (ADR)	: P903, P908, P909, P910, LP903, LP904
Transport category (ADR)	: 2
Tunnel restriction code (ADR)	: E
EAC code	: 4W

Transport by sea

Special provisions (IMDG)	: 188, 230, 310, 376, 377, 384, 387
Limited quantities (IMDG)	: 0
Excepted quantities (IMDG)	: E0
Packing instructions (IMDG)	: P903, P908, P909, P910, P911, LP903, LP904, LP905, LP906
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-I
Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW19
Properties and observations (IMDG)	: Electrical batteries containing lithium encased in a rigid metallic body. Lithium batteries may also be shipped in, or packed with, equipment. Electrical lithium batteries may cause fire due to an explosive rupture of the body caused by improper construction or reaction with contaminants.

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Air transport

PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Forbidden
PCA limited quantity max net quantity (IATA)	: Forbidden
PCA packing instructions (IATA)	: Forbidden
PCA max net quantity (IATA)	: Forbidden
CAO packing instructions (IATA)	: See 968
CAO max net quantity (IATA)	: See 968
Special provisions (IATA)	: A88, A99, A154, A164, A183, A201, A206, A213, A334, A802
ERG code (IATA)	: 12FZ

Inland waterway transport

Classification code (ADN)	: M4
Special provisions (ADN)	: 188, 230, 310, 376, 377, 387, 636
Limited quantities (ADN)	: 0
Excepted quantities (ADN)	: E0
Equipment required (ADN)	: PP
Number of blue cones/lights (ADN)	: 0

Rail transport

Classification code (RID)	: M4
Special provisions (RID)	: 188, 230, 310, _376, 377, 387, 636
Limited quantities (RID)	: 0
Excepted quantities (RID)	: E0
Packing instructions (RID)	: P903, 908, 909, P910, P911, LP903, LP904, LP905, LP906
Transport category (RID)	: 2
Colis express (express parcels) (RID)	: CE2
Hazard identification number (RID)	: 90

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 REACH substances with Annex XVII restrictions

Contains a substance on the REACH candidate list in concentration $\geq 0.1\%$ or with a lower specific limit: 1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME) (EC 203-794-9, CAS 110-71-4)

Contains no REACH Annex XIV substances

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

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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
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1	Skin corrosion/irritation, Category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
Water-react. 1	Substances and Mixtures which, in contact with water, emit flammable gases, Category 1
H225	Highly flammable liquid and vapour.
H228	Flammable solid.
H260	In contact with water releases flammable gases which may ignite spontaneously.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H360	May damage fertility or the unborn child.
H360FD	May damage fertility. May damage the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.

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.