

Safety Data Sheet according to Regulation (EC) No 1907/2006 (REACH) (amended by (EC) No 453/2010)

Issue date: 01.07.2017
Revision date : 01.03.2019
Valid from: 01.03.2019
Version: 1.1

Replaces Version: 1.0



1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Trade name / designation: Rocket Motor Ignitor, Mod.: Klima

Other means of identification: Ignitors for motors for model rockets

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

Relevant identified uses:

For igniting motors of model rockets, rocket gliders and model rocket cars

1.3 Details of the supplier of the safety data sheet:

Manufacturer / Supplier

Speer Pyrotechnik

Address

Hans Böckler Allee 51

Post code / City / Country

D-52074 Aachen, Deutschland

Information Contact

Speer Pyrotechnik

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1.4 EMERGENCY TELEPHONE NUMBER: +49 171 1674805

Giftinformationszentrale Mainz – 24/7 Hotline – Tel. +49 (0) 6131 19240

2. Hazards identification

2.1 Classification of the substance or mixture

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

H204 - Fire or projection hazard.

Classification according to 67/548/EEC or 1999/45/EC:

R 10 – Flammable.

R 22 – Harmful if swallowed.

2.2 Label elements

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

Hazard pictograms:



Signal word:

Explosives, division 1.4 S

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Hazard statements

R 10 – Flammable.
R 22 – Harmful if swallowed.

Precautionary statements

S 2 Keep away from children.
S 16 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Supplemental Hazard information (EU): -

2.3 Other hazards: -

3. Composition/information on ingredients

3.1 Substances

Composition/information on ingredients

Substance name: potassium perchlorate
Index-No: 017-008-00-5
EG-No: 231-912-9
CAS-No: 7778-74-7

Substance name: Copper benzoate
Index-No: --
EG-No: 208-534-8
CAS-No: 532-32-1

Substance name: Collodion wool
Index-No.: 603-037-00-6
CAS-No.: 9004-70-0

This mixture does not contain further substances fulfilling the criteria of hazard class "acute toxicity" according to CLP regulation.

4. First aid measures

4.1 Description of first aid measures

Following inhalation:

Not possible

Following skin contact:

Not possible

Following eye contact:

Not possible

Following ingestion:

Not possible

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

4.3 Indication of any immediate medical attention and special treatment needed: -

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5. Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media: dry powder, carbon dioxide, water

Unsuitable extinguishing media: -

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products are possible

Possible combustion products: carbon monoxide, carbon dioxide

5.3 Advice for fire-fighters

In case of fire use breathing protection with independent fresh air supply. Avoid skin contact by wearing suitable protective clothing and by abidance of safety distance.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from ignition source.

6.2 Environmental precautions:

Do not let product enter canalisation/surface waters/ground waters.

6.3 Methods and material for containment and cleaning up

Collect used product for itself and place in to container for disposal according to local regulations

6.4 Reference to other sections

Further directions for disposal in section 13.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Keep packaging closed and only open for extraction of product.

Fire preventions

No special measure required.

Aerosol and dust generation preventions

No special measure required.

Environmental precautions

No special measure required.

General Hygiene

Keep away from food and pet food.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Store in a cool and dry area.

Requirements for storage rooms and vessels

Cool and dry.

Storage class: 1.4S

Further information on storage conditions:

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8. Exposure controls/personal protection

8.1 Control parameters

8.1.1 Occupational exposure limits

Does not contain materials with exposure limits. Not applicable.

8.1.2 DNEL/PNEC-values

Not applicable

8.2 Exposure controls

See section 7.

8.2.1 Appropriate engineering controls

Not applicable.

8.2.2 Personal protective equipment

Eye / Face protection

Not required

Skin protection

Not required

Other skin protection measures

Not required

Respiratory protection

Not required

8.2.3 Environmental exposure controls:

8.2.3 Environmental exposure controls:

According to sections 6 and 7.

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9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state: Solid (wire / pcb / match head)

Color : black/white/red

Odor : odorless

Odor threshold : no data available

pH value: 7,01

Melting point/freezing point: not existant, because flashpoint comes first

Initial boiling point/boiling range: not existant, because flash point comes first

Flashpoint : 280° Celsius

Evaporation rate : --

Flammability (solid, gas): Yes, solid

Upper / Lower explosive limits: --

Vapour pressure : --

Vapour density : --

Relative density: 1,3 g/cm³

Solubility in water: 21,25 g/l, 20°C

Auto-ignition temperature : 280°C

Decomposition temperature : --

Viscosity, dynamic : --

Explosive properties: minor explosion hazard

Oxidising properties: none

9.2 Other information

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10. Stability and reactivity

10.1 Reactivity

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10.2 Chemical stability

The product is chemically stable under normal environmental conditions (room temperature).

10.3 Possibility of hazardous reactions

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10.4 Conditions to avoid

Heat.

10.5 Incompatible materials

Moisture.

10.6 Hazardous decomposition products

In case of fire: see section 5

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11. Toxicological information

11.1 Information on toxicological effects

For substances of the following hazard classes (including a short summary of existing test results and details of the procedures)

Acute toxicity

Quantitative Data on the ecological effect of this product is not available.

Skin corrosion/irritation

Skin contact is not possible.

Eye damage/irritation

Eye contact is not possible.

Sensitisation to the respiratory tract/skin

Sensitisation effects are not known.

Germ cell mutagenicity

No sufficient data available.

Carcinogenicity

No sufficient data available.

Reproductive toxicity

No sufficient data available.

Specific target organ toxicity (single exposure)

The product is not target organ toxic (single exposure)

Specific target organ toxicity (repeated exposure)

The product is not target organ toxic (repeated exposure)

Aspiration hazard

No sufficient data available.

Symptoms related to the physical, chemical and toxicological characteristics:

No relevant information available.

12. Ecological information

12.1 Toxicity:

Quantitative Data on ecological effects of this product are not available.

12.2 Persistence and degradability

Easily degradable.

12.3 Bioaccumulative potential

Bioaccumulative potential is not expected.

12.4 Mobility in soil

No relevant information available.

12.5 Results of PBT and vPvB assessment

Not applicable.

12.6 Other adverse effects

No relevant information available.

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13. Disposal considerations

13.1 Waste treatment methods

The used product is to be disposed of as residual waste.
Unused or damaged rocket motors are to be soaked in water before disposal.

Product / Packaging disposal

According to local laws and regulations.

Waste codes / waste designations according to EWC / AVV

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Waste treatment options

Not required.

Other disposal recommendations

Not required.

14. Transport information

14.1 UN-No.

0432

14.2 UN Proper shipping name

ADR/RID

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IMDG-Code / ICAO-TI / IATA-DGR

IMDG 1.4/II UN 0432 / CAO

14.3 Transport hazard class

1.4 S

14.4 Packing group

II

14.5 Environmental hazards

ADR/RID / IMDG-Code / ICAO-TI / IATA-DGR: yes / no

Marine Pollutant: yes / no

14.6 Special precautions for user

Not required.

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15. Regulatory information

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

EU regulations:

Rule No. 2007/23/EG
(Rule about bringing pyrotechnical objects in to circulation)

National regulations (DE):

Sprengstoffgesetz – SprengG
- 1. SprengV

DIN EN 16263-1 - DIN EN 16263-5

15.2 Chemical Safety Assessment

For the contents of this product a chemical safety assessment is not required.

16. Other information

Indication of changes

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Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer
(Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)

Key literature references and sources for data

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Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]: