

# SAFETY DATA SHEET

Thermostats filled with Potassium-sodium alloy (NaK)

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

### 1.1 Product identifier

**Product name** : Thermostats filled with Potassium-sodium alloy (NaK)  
**EC number** : Article.  
**CAS number** : Not applicable.  
**Other means of identification** : Not available.

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

**Product use** : Thermostas.

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

E.G.O. Elektro-Gerätebau GmbH  
 Rote-Tor-Straße 14  
 75038 Oberderdingen  
 Deutschland  
 Tel.: +49 (0)7045 45 67876

**e-mail address of person responsible for this SDS** : Dominik.Planer@egoproducts.com

### 1.4 Emergency telephone number

#### National advisory body/Poison Center

**Telephone number** : Beratungsstelle für Vergiftungserscheinungen Bonn  
 Tel. 0228/2873-211  
 Tel. 0228/2873-333

#### Supplier

**Telephone number** : -

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Article containing a mixture of Na/K. The classification refers to this mixture.

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

Water-react. 1, H260  
 Skin Corr. 1B, H314  
 Eye Dam. 1, H318

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : H260 - In contact with water releases flammable gases which may ignite spontaneously.  
 H314 - Causes severe skin burns and eye damage.

**SECTION 2: Hazards identification****Precautionary statements****Prevention**

- : P223 - Do not allow contact with water.
- P231 + P232 - Handle under inert gas, protect from moisture.
- P260 - Do not breathe dust or mist.

**Response**

- : P370 + P378 - Use special metal fire powder to extinguish. Never use water to extinguish.
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P303 + P361 + P353 + P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Immediately call a POISON CENTER or physician.

**Storage**

- : P402 + P404 - Store in a dry place and/or in closed container.

**Disposal**

- : Not applicable.

**Hazardous ingredients**

- : potassium
- sodium

**Supplemental label elements**

- : Reacts violently with water.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles**

- : Not applicable.

**2.3 Other hazards****Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII**

- : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**Other hazards which do not result in classification**

- : None known.

**SECTION 3: Composition/information on ingredients****3.1 Substances**

- : Article containing a mixture of Na/K. The classification refers to this mixture.

| Product/ingredient name | Identifiers                                            | %         | Regulation (EC) No. 1272/2008 [CLP]                                                                                                                          | Type |
|-------------------------|--------------------------------------------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| potassium               | EC: 231-119-8<br>CAS: 7440-09-7<br>Index: 019-001-00-2 | ≥77 - ≤79 | Water-react. 1, H260<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>EUH014                                                                                    | [1]  |
| sodium                  | EC: 231-132-9<br>CAS: 7440-23-5<br>Index: 011-001-00-0 | ≥21 - ≤23 | Water-react. 1, H260<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>EUH014<br><br><b>See Section 16 for the full text of the H statements declared above.</b> | [1]  |

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

**Type**

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

## SECTION 3: Composition/information on ingredients

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- |                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eye contact</b>                | : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Inhalation</b>                 | : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.                                                                                                                                            |
| <b>Skin contact</b>               | : Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Brush off loose particles from skin. Immerse in cool water or wrap in wet bandages. Remove contaminated clothing and shoes. Gloves should be worn when removing clothing to prevent additional exposure. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Dispose of contaminated clothing and shoes.                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Ingestion</b>                  | : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |
| <b>Protection of first-aiders</b> | : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Gloves should be worn when removing clothing to prevent additional exposure.                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

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

#### Potential acute health effects

- |                     |                                                     |
|---------------------|-----------------------------------------------------|
| <b>Eye contact</b>  | : Causes serious eye damage.                        |
| <b>Inhalation</b>   | : No known significant effects or critical hazards. |
| <b>Skin contact</b> | : Causes severe burns.                              |
| <b>Ingestion</b>    | : No known significant effects or critical hazards. |

#### Over-exposure signs/symptoms

- |                     |                                                                                                        |
|---------------------|--------------------------------------------------------------------------------------------------------|
| <b>Eye contact</b>  | : Adverse symptoms may include the following:<br>pain<br>watering<br>redness                           |
| <b>Inhalation</b>   | : No specific data.                                                                                    |
| <b>Skin contact</b> | : Adverse symptoms may include the following:<br>pain or irritation<br>redness<br>blistering may occur |
| <b>Ingestion</b>    | : Adverse symptoms may include the following:<br>stomach pains                                         |

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

## SECTION 4: First aid measures

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media** : Use approved Class D extinguisher or smother with dry sand, dry clay or dry ground limestone.
- Unsuitable extinguishing media** : water, Use dry chemical or CO<sub>2</sub>., Foam, Chlorinated hydrocarbon.

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

- Hazards from the substance or mixture** : Contact with water liberates extremely flammable gases., Corrosive gas. Spontaneously flammable in air.
- Hazardous combustion products** : Decomposition products may include the following materials: metal oxide/oxides

### 5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

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

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Keep away from water. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

- : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### 6.3 Methods and materials for containment and cleaning up

- Small spill** : Move containers from spill area. Avoid allowing the spilled material to get wet or using water to clean up spillages or residues, unless the quantity remaining is very small. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid allowing the spilled material to get wet or using water to clean up spillages or residues, unless the quantity remaining is very small. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

**SECTION 6: Accidental release measures**

- 6.4 Reference to other sections** :
- See Section 1 for emergency contact information.
  - See Section 8 for information on appropriate personal protective equipment.
  - See Section 13 for additional waste treatment information.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

- Protective measures** :
- Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe dust or mist. Do not ingest. Handle under inert gas. Use only with adequate ventilation. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Keep away from any possible contact with water, because of violent reaction and possible flash fire. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** :
- Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**7.2 Conditions for safe storage, including any incompatibilities**

Keep away from: Oxidizing materials, acids, Alcohol, organic materials. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep away from water or moist air. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

**Seveso Directive - Reporting thresholds (in tonnes)****Danger criteria**

| Category                                           | Notification and MAPP threshold | Safety report threshold |
|----------------------------------------------------|---------------------------------|-------------------------|
| O1: EUH014                                         | 100                             | 500                     |
| O2: In contact with water, emits flammable gases 1 | 100                             | 500                     |

**Storage class (TRGS 510)** : 4.3

**7.3 Specific end use(s)**

Section 7. Handling and storage: The information in this section contains generic advice and guidance.

**SECTION 8: Exposure controls/personal protection**

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

**8.1 Control parameters****Occupational exposure limits**

No exposure limit value known.

- Recommended monitoring procedures** :
- If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures

**SECTION 8: Exposure controls/personal protection**

for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**DNELs/DMELs**

No DNELs/DMELs available.

**PNECs**

No PNECs available.

**8.2 Exposure controls****Appropriate engineering controls**

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Engineering controls may be required to control the primary or secondary risks associated with this product. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Individual protection measures****Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection**

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Wear tightly-sealed safety glasses (EN 166). Wear suitable face shield. If inhalation hazards exist, a full-face respirator may be required instead.

**Skin protection****Hand protection**

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.  
**Recommended:** Wear suitable gloves tested to EN374.  
Protective/insulated gloves. Index 6, > 480 minutes (breakthrough time): Nitrile gloves. (thickness: 0.4 mm), Chloroprene (thickness: 0.5 mm), Butyl gloves. (thickness: 0.7 mm) and Heat insulating materials.

**Body protection**

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection**

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection**

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: self-contained breathing apparatus (SCBA)

**Environmental exposure controls**

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.



**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**Appearance

|                                                     |                                                           |
|-----------------------------------------------------|-----------------------------------------------------------|
| <b>Physical state</b>                               | : Capsule with Na/K filling.                              |
| <b>Color</b>                                        | : Silvery.                                                |
| <b>Odor</b>                                         | : Odorless.                                               |
| <b>Odor threshold</b>                               | : Not available.                                          |
| <b>pH</b>                                           | : Not applicable.                                         |
| <b>Melting point/freezing point</b>                 | : Not available.                                          |
| <b>Initial boiling point and boiling range</b>      | : Not available.                                          |
| <b>Flash point</b>                                  | : Not applicable.                                         |
| <b>Evaporation rate</b>                             | : Not available.                                          |
| <b>Flammability (solid, gas)</b>                    | : Contact with water liberates extremely flammable gases. |
| <b>Upper/lower flammability or explosive limits</b> | : Not available.                                          |
| <b>Vapor pressure</b>                               | : Not available.                                          |
| <b>Vapor density</b>                                | : Not available.                                          |
| <b>Relative density</b>                             | : Not available.                                          |
| <b>Solubility(ies)</b>                              | : Not available.                                          |
| <b>Solubility in water</b>                          | : Not applicable.                                         |
| <b>Partition coefficient: n-octanol/ water</b>      | : Not available.                                          |
| <b>Auto-ignition temperature</b>                    | : Not available.                                          |
| <b>Decomposition temperature</b>                    | : Not available.                                          |
| <b>Viscosity</b>                                    | : Not available.                                          |
| <b>Explosive properties</b>                         | : Not available.                                          |
| <b>Oxidizing properties</b>                         | : Not available.                                          |

**9.2 Other information**

No additional information.

**SECTION 10: Stability and reactivity**

|                                                |                                                                                                                                                                                               |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>10.1 Reactivity</b>                         | : contact with water: Violent reaction may occur. Contact with water liberates extremely flammable gases.                                                                                     |
| <b>10.2 Chemical stability</b>                 | : The product is stable.                                                                                                                                                                      |
| <b>10.3 Possibility of hazardous reactions</b> | : Evolves hydrogen on contact with water. Uncontrolled exothermic reactions occur with amines and alcohols.                                                                                   |
| <b>10.4 Conditions to avoid</b>                | : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.                     |
| <b>10.5 Incompatible materials</b>             | : Highly reactive or incompatible with the following materials:<br>water, oxidizing agents, Reducing agents, peroxides, halogenated compounds, halogenated hydrocarbons, Teflon, Metal oxide. |
| <b>10.6 Hazardous decomposition products</b>   | : In contact with water releases flammable gases which may ignite spontaneously.                                                                                                              |

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

**Conclusion/Summary** : Not available.

#### Acute toxicity estimates

Not available.

#### Irritation/Corrosion

##### **Conclusion/Summary**

**Skin** : Causes serious eye damage.

**Eyes** : Causes severe eye irritation.

#### Sensitization

**Conclusion/Summary** : Not available.

#### Mutagenicity

**Conclusion/Summary** : Not available.

#### Carcinogenicity

**Conclusion/Summary** : Not available.

#### Reproductive toxicity

**Conclusion/Summary** : Not available.

#### Teratogenicity

**Conclusion/Summary** : Not available.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Not available.

#### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

#### Potential acute health effects

**Eye contact** : Causes serious eye damage.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : Causes severe burns.

**Ingestion** : No known significant effects or critical hazards.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness

**Inhalation** : No specific data.

**Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur

**Ingestion** : Adverse symptoms may include the following:  
stomach pains

#### Delayed and immediate effects and also chronic effects from short and long term exposure

##### Short term exposure



## SECTION 11: Toxicological information

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**Conclusion/Summary** : Not available.

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Reproductive toxicity** : No known significant effects or critical hazards.

**Other information** : Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

**Conclusion/Summary** : Not available.

### 12.2 Persistence and degradability

**Conclusion/Summary** : The methods for determining the biological degradability are not applicable to inorganic substances.

### 12.3 Bioaccumulative potential

Not available.

### 12.4 Mobility in soil

**Soil/water partition coefficient ( $K_{oc}$ )** : Not available.

**Mobility** : Not available.

### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance.

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**SECTION 13: Disposal considerations**

The allocation of waste identity numbers/waste descriptions must be carried out according to the EWC, specific to the industry and process.

- Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.
- Packaging**
- Methods of disposal** : The generation of waste should be avoided or minimized wherever possible.
- Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**SECTION 14: Transport information**

|                                        | ADR/RID                                                                                                              | ADN                                                                                                                  | IMDG                                                                                                                 | IATA                                                                                                               |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| <b>14.1 UN number</b>                  | UN3543                                                                                                               | UN3543                                                                                                               | UN3543                                                                                                               | UN3543                                                                                                             |
| <b>14.2 UN proper shipping name</b>    | ARTICLES CONTAINING A SUBSTANCE WHICH IN CONTACT WITH WATER EMITS FLAMMABLE GASES, N.O.S. (Sodium/Potassium-Mixture) | ARTICLES CONTAINING A SUBSTANCE WHICH IN CONTACT WITH WATER EMITS FLAMMABLE GASES, N.O.S. (Sodium/Potassium-Mixture) | ARTICLES CONTAINING A SUBSTANCE WHICH IN CONTACT WITH WATER EMITS FLAMMABLE GASES, N.O.S. (Sodium/Potassium-Mixture) | Articles containing a substance which in contact with water emits flammable gas, n.o.s. (Sodium/Potassium-Mixture) |
| <b>14.3 Transport hazard class(es)</b> | 4.3                                                                                                                  | 4.3                                                                                                                  | 4.3                                                                                                                  | 4.3                                                                                                                |
| <b>Label</b>                           |                                   |                                   |                                 |                               |
| <b>14.4 Packing group</b>              | -                                                                                                                    | -                                                                                                                    | -                                                                                                                    | -                                                                                                                  |
| <b>14.5 Environmental hazards</b>      | No.                                                                                                                  | No.                                                                                                                  | Marine Pollutant: No                                                                                                 | No.                                                                                                                |

**Additional information****ADR/RID**

- : **Limited quantity** 0  
**Special provisions** 274  
**Tunnel code** (E)

**Note:** ADR 1.6.1.46 - may continue to be exempted from the provisions of ADR until 31 December 2022 provided that measures have been taken to prevent any leakage of contents in normal conditions of carriage

**ADN**

- : **Special provisions** 274

**IMDG**

- : **Emergency schedules** F-G, S-N  
**Special provisions** 274, 391

**IATA**

- : **Quantity limitation** Passenger and Cargo Aircraft: Forbidden. Packaging instructions: Forbidden. Cargo Aircraft Only: Forbidden. Packaging instructions: Forbidden. Limited Quantities - Passenger Aircraft: Forbidden. Packaging instructions: Forbidden.  
**Special provisions** A806

**14.6 Special precautions for user**

- : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Transport in bulk according to IMO instruments**

- : Not applicable.

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU Regulation (EC) No. 1907/2006 (REACH)****Annex XIV - List of substances subject to authorization****Annex XIV**

None of the components are listed.

**Substances of very high concern**

| <b>Ingredient name</b> | <b>Intrinsic property</b> | <b>Status</b> | <b>Reference number</b> | <b>Date of revision</b> |
|------------------------|---------------------------|---------------|-------------------------|-------------------------|
| lead                   | Toxic to reproduction     | Candidate     | ED/61/2018              | 27/06/2018              |

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

**Other EU regulations**

**Industrial emissions (integrated pollution prevention and control) - Air** : Listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Listed

**Ozone depleting substances (1005/2009/EU)**

Not listed.

**Prior Informed Consent (PIC) (649/2012/EU)**

Not listed.

**Seveso Directive**

This product is controlled under the Seveso Directive.

**Danger criteria**

| <b>Category</b>                                    |
|----------------------------------------------------|
| O1: EUH014                                         |
| O2: In contact with water, emits flammable gases 1 |

**National regulations**

**Storage class (TRGS 510)** : 4.3

**Hazardous incident ordinance**

This product is controlled under the Germany Hazardous Incident Ordinance.

**Danger criteria**

| <b>Category</b> | <b>Reference number</b> |
|-----------------|-------------------------|
| O1              | 1.4.1                   |
| O2              | 1.4.2                   |

**Hazard class for water** : 1 (refers to Na/K mixture)

**Maternity Protection Act (MuSchG)** : Not applicable.

**Law on the protection of young workers** : Observe employment restrictions according to §22 JArbSchG for young people.

**Technical instruction on air quality control** : TA-Luft Number 5.2.1: 98-100%

**AOX** : The product does not contain organically bound halogens which could lead to an AOX value in waste water.

**SECTION 15: Regulatory information**International regulationsChemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

|                                   |                                          |
|-----------------------------------|------------------------------------------|
| <b>Australia inventory (AICS)</b> | : All components are listed or exempted. |
| <b>Canada</b>                     | : All components are listed or exempted. |
| <b>China</b>                      | : All components are listed or exempted. |
| <b>Europe</b>                     | : All components are listed or exempted. |
| <b>New Zealand</b>                | : All components are listed or exempted. |
| <b>Philippines</b>                | : All components are listed or exempted. |
| <b>Republic of Korea</b>          | : All components are listed or exempted. |
| <b>Taiwan</b>                     | : All components are listed or exempted. |
| <b>United States</b>              | : All components are active or exempted. |
| <b>Viet Nam</b>                   | : All components are listed or exempted. |

**15.2 Chemical Safety Assessment** : Not applicable.

**SECTION 16: Other information**

 Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** :

- ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
- ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- EWC = European Waste Catalogue
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- N/A = Not available
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
- RRN = REACH Registration Number
- SGG = Segregation Group
- vPvB = Very Persistent and Very Bioaccumulative

Thermostats filled with Potassium-sodium alloy (NaK)

**SECTION 16: Other information****Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

| Classification                                                  | Justification                                               |
|-----------------------------------------------------------------|-------------------------------------------------------------|
| Water-react. 1, H260<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318 | Expert judgment<br>Calculation method<br>Calculation method |

**Full text of abbreviated H statements**

|        |                                                                                |
|--------|--------------------------------------------------------------------------------|
| H260   | In contact with water releases flammable gases which may ignite spontaneously. |
| H314   | Causes severe skin burns and eye damage.                                       |
| H318   | Causes serious eye damage.                                                     |
| EUH014 | Reacts violently with water.                                                   |

**Full text of classifications [CLP/GHS]**

|                                               |                                                                                                                                                                                       |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eye Dam. 1<br>Skin Corr. 1B<br>Water-react. 1 | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1<br>SKIN CORROSION/IRRITATION - Category 1B<br>SUBSTANCES AND MIXTURES, WHICH IN CONTACT WITH WATER, EMIT FLAMMABLE GASES - Category 1 |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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