

Article Number: 33 xxxxxx

Article Description: **Thallium Bromide/Iodide**

1. Identification of the substance and the company

Article Number: 33 xxxxxx

Article Description: **Thallium Bromide/Iodide (42% and 58 %)***Synonyms, Trade Name:* **KRS-5**

Company: Korth Kristalle GmbH * Am Jägersberg 3 * D-24161 Altenholz * Tel ++49 431 36905-0

Information : Telefon: ++49 431 36905-0 Telefax: ++49 431 36905-25

2. Composition/ Information on Ingredients

CAS-No.: 7789-40-4 (Thallium Bromide) EG Index No.: 081-002-00-9

7790-30-9 (Thallium Iodide)

Mole weight: not applicable

EINECS-No.: 232-163-0 (TlBr)/232-199-7 (TlI)

Chemical formula: **TlBr/TlI**

3. Hazards Information

Extremely toxic by ingestion with a cumulative effect. Affects nervous system, skin and cardiovascular system. Symptoms include vomiting, muscle pains and swelling, mental confusion and insomnia, hair loss. Also harmful in contact with skin. Particular care must be exercised when machining and creating dust or particles. Toxic for organisms in water, can have long-period dangerous effects in lakes and rivers.

4. First Aid Measures

General: Consult a physician for specific advice.

Eyes: Wash off thoroughly with water. Gently dry with clean towel. Remove contaminated clothing before re-use.

Inhalation: Remove to uncontaminated area. Perform artificial respiration if breathing has stopped. When breathing is difficult, properly trained personnel may administer oxygen. Keep affected person warm and at rest. Obtain medical attention.

Ingestion: Induce vomiting if conscious and as directed by a properly qualified person. Wash out mouth thoroughly with water. Never make an unconscious person vomit or drink fluids. Obtain medical attention immediately.

5. Fire Fighting Measures

Extinguishing Media: Water, CO₂, foam or dry chemical
not ignitable, may evolve toxic fumes in a fire

6. Accidental Release Measures

Wear suitable protective clothing and equipment as listed under Exposure/Personel Protection. Take up and containerize for proper disposal. Avoid making dust. Containerize any cleaning materials used for proper disposal.

7. Handling and Storage

Usage Precautions:

Keep away from heat. Avoid skin contact. Handle carefully. Protect against physical damage. Avoid generating dust.

Storage Precautions:

Keep away from foodstuffs. Keep away from acids and strong bases.

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8. Exposure Control and Personal Protection

Exposure Limits OES, 0.1 mg/m³ long-term, 8 hour TWA

Protective gloves made of polyvinyl alcohol (PVA) are required. Use of a laboratory coat is suggested. Safety goggles or safety glasses with side shields are required if there is any possibility of chipping or dust creation. Respirators must be worn when the threshold limit is exceeded. Provide adequate general mechanical ventilation and local exhaust ventilation.

When handling quantities of this material be sure to wear appropriate protective equipment as described. Eye wash should be readily available. Wash thoroughly after handling. Do not take internally. Avoid breathing dust when generated. For persons with sensitive existing medical conditions, medical advice should be sought before employing on tasks involving exposure to this material.

9. Physical and Chemical Properties

Appearance

State of Matter: solid	Colour: reddish	Odour: no
Melting point: 414°C		
Boiling point: not investigated		
Flash Point: not applicable		
Flammability: not applicable		
Explosive Properties:	not applicable	
Vapour Pressure:	not applicable	
Density:	7,37 g/cm ³	
Solubility in Water:	50mg/100ml H ₂ O at 20 °C	
pH in Aqueous Solution:	not determined	

10. Stability and Reactivity

Stability:

Stable under normal conditions of storage and use.

Hazardous Decomposition:

Can react violently with oxidising agents. Can ignite in contact with chlorine and bromine.

Materials to avoid:

<input type="checkbox"/> Water	<input type="checkbox"/> Acids	<input type="checkbox"/> Bases
<input type="checkbox"/> Corrosives	<input type="checkbox"/> Oxidisers	<input type="checkbox"/> Other

11. Toxicological Information

Toxic Dose: LD50 < 200mg/kg (oral, rat)

Carcinogenicity: no evidence of carcinogenic properties

Mutagenicity/Teragenicity: Evidence of reproductive effects

Toxicological Findings: Extremely toxic by ingestion with a cumulative effect. Affects nervous system, skin and cardiovascular system. Symptoms include vomiting, muscle pains and swelling, mental confusion and insomnia, hair loss. Also harmful in contact with skin. Particular care must be exercised when machining and creating dust or particles.

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Toxic for organisms in water, can have long-period dangerous effects in lakes and rivers.

13. Disposal Considerations

Chemical residues are generally classified as special waste, and as such are covered by regulations which vary according to location. Contact your local waste disposal authority for advice, or pass to a chemical disposal company.

Packing Material:

Contaminated packing material has to be handle like the material itself.

14. Transport Information

UN Number:	1707	
IATA Number:	1707/1	THALLIUM COMPOUNDS N.O.S
IATA Packing group:	II	
IATA Passenger number:	0613	
IATA Cargo number:	0615	
IMO Number:	6.1/1707/01	THALLIUM COMPOUNDS N.O.S.
IMO Packing group:	II	
IMO Stowage:	S Special Stowage	
TREM Group number:	61G09	HIGHLY TOXIC SUBSTANCES, NOT COMBUSTABLE
ADR/RID Number:	6.1,53' (b)	
Transit description:	THALLIUM BROMIODIDE	
AIR Matrix number:	47 Low reactivity	
AIR Passenger limit:	25kg	
AIR Cargo limit:	100kg	
SEA Matrix number:	47 Low reactivity	
SEA own class limit:	8 tonnes	
Tin required ? : SEA/ROAD [N]	AIR CARGO [N]	AIR PASSENGER [N]
POST [Y]		
Packing material:	Vermiculite	

15. Regulatory Information*Classification*

T+ very toxic
N dangerous for the environment

Risk Phrases:	R26/28	very toxic by inhalation and if swallowed
	R33	danger of cumulative effects
	R51/53	danger for organisms in water, long-term effects
	S13	Keep away from food, drink and animal feeding stuffs
	S28.1	After contact with skin, wash immediately with plenty of water.
	S45	In case of accident or if you feel unwell, seek medical advice immediately (show label where possible)

Korth Kristalle GmbH

According to EC Directive 91/155/EEC

Safety Data Sheet

printing date: 15.03.2005

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S61 Avoid release of material in environment, seek for special instructions
EG-Number: 232-199-7 (TIJ); 232-163-0 (TIBr)

16. Other information

This information is made on the base of the present knowledge and serve as a description of the product concerning necessary safety precautions. This is no assurance of properties of the described material.