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

Product Name: #9220 JOBO E-6 Color Positive kit Reversal bath

Name of Manufacturer: JOBO International GmbH

Adress: Kölner Straße 58a·51645 Gummersbach Germany

Name of Section: Johannes Bockemuehl Phone Number: +49 (0) 2261 - 545-35

MSDS No.: J9220-02

2. Hazards identification

Hazard class	Hazard category
Specific target organ systemic toxicity - single exposure	Category 3
Specific target organ systemic toxicity - repeated exposure	Category 2
Hazardous top the Aquatic Environmental	Category 2

GHS-Labelling

Contains:

Stannous chloride (7772-99-8), Propionic acid sodium salt.(137-40-6)

Symbol(s):



Signal word: Warning

Hazard statements: May be corrosive to metals. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements:

Prevention: Keep only in original container. Wear protective gloves/ protective clothing/ eye protection/ face protection. In case of inadequate ventilation wear respiratory protection. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash thoroughly after handling.

Response: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention. Absorb spillage to prevent material damage.

Storage: Store in corrosive resistant container with resistant inliner.

Disposal: Dispose of contents/container in accordance with local/regional/national/international regulation.

HMIS III Hazard Ratings: Health - 2, Flammability - 1, Physical Hazard - 0

NFPA Hazard Ratings: Health - 2, Flammability - 1, Instability - 0

NOTE: HMIS III and NFPA 704 (2007) hazard indexes involve data review and interpretation that may vary among companies. They are intended only for rapid, general identification of the magnitude of the potential hazards. To adequately address safe handling, ALL information in this MSDS must be considered.

3. Composition/information on ingredients

Components - (CAS-No.)	Weight percent
Water(17732-18-5)	45 - 65
Propionic acid sodium salt(137-40-6)	20 – 30
Organic Phosphoric Acid sodium Salt(20592-85-2)	< 5
Trisodium Phosphate(10101-89-0)	5 - 15
Stannous chloride (7772-99-8)	< 3

4. First aid measures

Inhalation: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

Skin: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/ attention. Take off contaminated clothing and wash before reuse.

Ingestion: Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed: No information available.

Indication of any immediate medical attention and special treatment needed:

Treatment: No information available.

5. Firefighting measures

Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

Hazardous Combustion Products: Carbon oxides

Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing.

Unusual Fire and Explosion Hazards: None.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Refer to protective measures listed in sections 7 and 8.

Methods and materials for containment and cleaning up: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination.

Environmental precautions: No information available.

7. Handling and storage

Precautions for safe handling

Personal precautions: Avoid breathing mist or vapour at concentrations greater than the exposure limits. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

Prevention of Fire and Explosion: Keep from contact with oxidizing materials.

Conditions for safe storage, including any incompatibilities: Keep container tightly closed. Keep away from incompatible substances (see Incompatibility section.)

8. Exposure controls/personal protection

Occupational exposure controls

Chemical	Regulatory	Value Type	Value
Name	List		
Stannous	ACGIH	Time weighted average	2 mg/m3
chloride			Expressed as Sn
			Remarks: except tin hydride

Appropriate engineering controls: Good general ventilation should be used. Ventilation should be sufficient so that applicable occupational exposure limits are not exceeded. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory protection may be needed in special circumstances.

Individual protection measures, such as personal protective equipment

Eye protection: Wear safety glasses with side shields (or goggles).

Hand protection: Wear impervious gloves and protective clothing appropriate for the risk of exposure.

Respiratory protection: None should be needed. If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator must be worn. If respirators are used, a program should be instituted to assure compliance with applicable federal, state, commonwealth, provincial, or local laws and regulations.

9. Physical and chemical properties

Physical form: liquid Color: Faint yellow Odor: Odorless

Specific gravity: 1.24

Vapour pressure: No data available Vapour density: No data available

Boiling point/boiling range: > 100 °C (> 212.0 °F)

Water solubility: complete

pH: 6.1

Flash point: Non flammable

Evaporation rate: No data available

Flammability (Solid; gas): No data available Upper explosion limit: No data available Lower explosion limit: No data available Partition coefficient: n-octanol/water: No data available

Auto-ignition temperature: No data available Decomposition temperature: No data available

Viscosity: No data available

Explosive properties: No data available Oxidizing properties: No data available

10. Stability and reactivity

Reactivity: No data available

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: Hazardous polymerisation does not occur.

Conditions to avoid: No data available

Incompatible materials: Strong oxidizing agents, Metals.

Hazardous decomposition products: None under normal conditions of use.

11. Toxicological information

Effects of Exposure

General advice:

Contains: Stannous chloride. Chronic inhalation of tin dust or fumes can cause benign pneumoconiosis.

Numerical measures of toxicity - Product Information

Oral LD50 (rat): >2000mg/kg (ATEmix)

ATE: Acute toxicity estimate

Data for Stannous chloride (CAS 7772-99-8):

Acute Toxicity Data:

Oral LD50 (Rat): 2,300 mg/kg

12. Ecological information

The following properties are ESTIMATED from the components of the preparations.

Potential Toxicity:

Toxicity to fish (LC50): No data available

Toxicity to daphnia (EC50): No data available

Toxicity to algae (IC50): No data available Persistence and degradability: Not readily biodegradable.

Bioaccumulative potential No data available

Mobility in soil No information available.

13. Disposal considerations

Discharge, treatment, or disposal may be subject to federal, state, commonwealth, provincial, or local laws. Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport information

Not regulated for all modes of transportation.

15. Regulatory information

Notification status

Regulatory List Notification status

TSCA All listed
DSL All listed
NDSL None listed

EINECS All listed

ELINCS None listed NLP None listed **AICS** All listed **IECS** All listed **ENCS** All listed **ECI** All listed **NZIoC** All listed **PICCS** Not all listed

"Not all listed" indicates one or more component is either not on the public Inventory or is subject to exemption requirements.

16. Other information

9220 JOBO E-6 Color Positive kit Reversal bath

Volume per unit: 125ml

The data below reflects current legislative requirements whereas the product in your possession may carry a different version of the label depending on the date of manufacture.