

Material Safety Data Sheet

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

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

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. : J9220-07

2. Hazards identification

Hazard class	Hazard category	Route of exposure
Acute toxicity	Not Classified	Oral

CONTAINS: Ammonium thiosulphate (7783-18-8), Sodium sulphite (7757-83-7)

WARNING!

DRIED PRODUCT RESIDUE CAN ACT AS A REDUCING AGENT

MAY BE HARMFUL IF SWALLOWED

3. Composition/information on ingredients

Components - (CAS-No.)	Weight percent
Water (7732-18-5)	40- 60
Ammonium thiosulfate (7783-18-8)	35 - 45
Sodium sulfite (7757-83-7)	5 - 15

4. First aid measures

Inhalation: If inhaled, remove to fresh air. Get medical attention if symptoms occur.

Eyes: Any material that contacts the eye should be washed out immediately with water. Get medical attention if symptoms occur.

Skin: Wash off with soap and water. Get medical attention if symptoms occur.

Ingestion: If swallowed, DO NOT induce vomiting. Call a physician or poison control centre immediately. Never give anything by mouth to an unconscious person.

5. Fire-fighting measures

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

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

Fire or excessive heat may produce hazardous decomposition products.

Hazardous Combustion Products: Carbon oxides, nitrogen oxides (NO_x), Sulphur oxides, (see also Hazardous Decomposition Products sections.)

Unusual Fire and Explosion Hazards: Dried product residue can act as a reducing agent. Reacts violently with oxidizing materials. May cause spontaneous heating and ignition when absorbed on combustible, porous material (e.g. rags, paper, sawdust, cotton, clothing).

6. Accidental release measures

Absorb spill with vermiculite or other inert material. Collect in a noncombustible container for prompt disposal. Clean surface thoroughly to remove residual contamination.

For Large Spills: Flush with plenty of water.

7. Handling and storage

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, highly oxygenated or halogenated solvents, organic compounds containing reducible functional groups. Remove and wash contaminated clothing promptly.

Storage: Store in original container. Keep container tightly closed to prevent the loss of water. Keep away from incompatible substances (see Incompatibility section.)

8. Exposure controls/personal protection

Occupational exposure controls

Chemical Name	Regulatory List	Value Type	Value
Sodium bisulfite	List	time weighted average	
Sodium bisulfite	ACGIH		No date setting

Ventilation: 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.

Respiratory protection: None should be needed.

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

Hand protection: For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.

9. Physical and chemical properties

Physical form: liquid

Color: colorless

Odor: Ammonia odor

Specific gravity: 1.31

Vapour pressure : No data available

Vapour density: No data available

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

Water solubility: complete

pH: 6.2

Flash point: Non flammable

10. Stability and reactivity

Stability: Stable under normal conditions.

Incompatibility: Acids, Strong bases, sodium hypochlorite (bleach), Halogenated compounds, Oxidizing agents. Contact with strong acids liberates sulphur dioxide. Contact with sodium hypochlorite (bleach) may form chloramine (toxic gas). Contact with base liberates flammable material. Contact with base liberates ammonia.

Hazardous decomposition products: Ammonia, chloramine, Sulphur oxides, nitrogen oxides (NO_x)

Hazardous Polymerization: Hazardous polymerisation does not occur

11. Toxicological information

Effects of Exposure

Inhalation: Expected to be a low hazard for recommended handling. In contact with strong acids or if heated, sulphites may liberate sulphur dioxide gas. Sulphur dioxide gas is irritating to the respiratory tract. Some asthmatics or hypersensitive individuals may experience difficult breathing.

Eyes: No specific hazard known. May cause transient irritation.

Skin: Expected to be a low hazard for recommended handling. This material has a low potential to cause allergic skin reactions; however, cases of human skin sensitization have been reported.

Ingestion: May be harmful if swallowed. Some asthmatics or sulfite-sensitive individuals may experience wheezing, chest tightness, stomach upset, hives, faintness, weakness and diarrhea.

Numerical measures of toxicity - Product Information

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

ATE: Acute toxicity estimate

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.

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	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 Fixer

Volume per unit : 325ml

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.

sed on correct mixing and use of the product according to instructions.