Safety Data Sheet

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

Product Name：# 9220 JOBO E-6 Color Positive kit Color developer part B

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.： J9220-04

2. Hazards identification

Classification of the chemical in accordance with paragraph (d) of 29 CFR 1910.1200:

Hazard class	Hazard category	Route of exposure
Skin corrosion	Category 1	--
Serious eye damage	Category 1	--

GHS-Labelling

Contains:

4-(N-ethyl-N-2-methanesulphonylaminoethyl)-2-methylphenylenediamine sesquisulphate monohydrate (25646-71-3),Sodium bisulfite (7631-90-5)

Symbol(s):

Signal word: Warning

Hazard statements: May be corrosive to metals. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. May cause damage to organs. (Kidney.)

Precautionary statements:

Prevention: Keep only in original container. Wear protective gloves/ eye protection/ face protection. Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace.

Response: IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/

attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Take off contaminated clothing and wash before reuse. Absorb spillage to prevent material damage. Rinse mouth.
Storage: Store in a well-ventilated place. Keep container tightly closed.
Disposal: Dispose of contents/container in accordance with local/regional/national/international regulation.
Other hazards which do not result in classification:
Can decompose at elevated temperatures.

3. Composition/information on ingredients

Components – (CAS-No.)	Weight percent
Water （7732-18-5）	45 - 65
4-(N-ethyl-N-2-methanesulphonylaminoethyl)-2-methylphenylenediamine sesquisulphate monohydrate (25646-71-3)	40 - 50
Sodium bisulfite (7631-90-5)	0.1 – 0.9

4. First aid measures

Inhalation: If inhaled, remove to fresh air. Get medical attention.
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 occurs: Get medical advice/ attention. Take off contaminated clothing and wash before reuse.
Ingestion: IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.
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, Sulphur oxides, Nitrogen oxides (NOx), (see also Hazardous Decomposition Products sections.)
Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing. Fire or excessive heat may produce hazardous decomposition products.
Unusual Fire and Explosion Hazards: Fire or high temperatures may cause decomposition.

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: Do not breathe mist or vapour at concentrations greater than the exposure limits. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Use only with adequate ventilation. Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing.

Prevention of Fire and Explosion: Keep away from heat and sources of ignition. 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 Name	Regulatory List	Value Type	Value
Sulfurous acid gas (7446-09-5)	EK HPG	TWA	5.2 mg/m3

Appropriate engineering controls: Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. Controls should be sufficient so that applicable occupational exposure limits are not exceeded.

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: If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator must be worn.

9. Physical and chemical properties

Physical form: liquid

Colour: Yellow
Odour: sulphur dioxide
Specific gravity: 1.18
Vapour pressure: No data available
Vapour density: No data available
Boiling point/boiling range: > 100 °C (> 212.0 °F)
Melting point/range: No data available
Water solubility: completely soluble
pH: < 1
Flash point: No 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: Not fully evaluated. Materials containing similar structural groups can decompose if heated.
Possibility of hazardous reactions: Hazardous polymerisation does not occur.
Conditions to avoid: No data available
Incompatible materials: Strong oxidizing agents, Strong bases. Contact with strong acids liberates sulphur dioxide.
Hazardous decomposition products: Nitrogen oxides (NOx), Sulphur oxides

11. Toxicological information
Effects of Exposure
General advice:
Inhalation: May be harmful if inhaled. Airborne dust/mist/vapor irritating. Liberates sulphur dioxide gas which can cause irritation to the respiratory tract. Some asthmatics or hypersensitive individuals

may experience difficulty breathing.

Eyes: Causes serious eye irritation. Airborne dust/mist/vapor irritating.

Skin: Harmful in contact with skin. Causes skin irritation. May cause allergic skin reaction based on human experience.

Ingestion: Harmful if swallowed. May cause irritation of the gastrointestinal tract if swallowed. Some asthmatics or sulfite-sensitive individuals may experience wheezing, chest tightness, stomach upset, hives, faintness, weakness and diarrhea.

Product Information

Oral LD50 (rat): ＞600mg/kg （ATEmix）

ATE: Acute toxicity estimate

Data for 4-(N-ethyl-N-2-methanesulphonylaminoethyl)-2-methylphenylenediamine sesquisulphate monohydrate (CAS 25646-71-3):

Oral LD50 (rat): ＞400mg/kg （ATEmix）

ATE: Acute toxicity estimate

Data for Sodium sulfite (CAS 7757-83-7):

Acute Toxicity Data:

Oral LD50 (Rat): 1310 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

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

IATA:	UN number:	UN3264
	Proper shipping name:	CORROSIVE LIQUID, ACIDIC, IN ORGANIC,

		N.O.S. (4-(N-ethyl-N-2-methanesulphonylaminoethyl)-2-methylphenylenediamine sesquisulphate monohydrate)
	Class:	8
	Packaging group:	III
IMDG:	UN number:	UN3264
	Proper shipping name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (4-(N-ethyl-N-2-methanesulphonylaminoethyl)-2-methylphenylenediamine sesquisulphate monohydrate)
	Class:	8
	Packaging group:	III
ADN:	UN number:	UN3264
	Proper shipping name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.(4-(N-ethyl-N-2methanesulphonylaminoethyl)-2- methylphenylenediamine sesquisulphate monohydrate)
	Class:	8
	Packaging group:	III

:

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
TSCA 12(b)	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 Color developer part B

Volume per unit：50ml

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.