

SDS Report

No.: 70.452.24.32582.01

Date: 2024-07-11



Applicant: KLEIN TOOLS INC

Sample Description: Fine tip marker/ultra fine tip marker/chisel tip marker/XL chisel tip marker

Country of Origin: China

Country of Destination: US

Receipt Date of Sample: 2024-06-12

Last Information Date: /

SDS Preparation Period 2024-06-12 ~ 2024-07-01

Test Result: Refer to the data listed in following pages.

Test Item(s):

Based on the information provided by the applicant, the Safety Data Sheet (SDS) was generated in accordance with requirements of OSHA Hazard Communication Standard (29 CFR 1910.1200), for details please refer to attached pages.

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch Testing Center

Prepared by:

Rainie Dai
Reporting Representative

Authorized by:

Neko Ding
Director



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Unless otherwise agreed upon, Pass or Fail verdicts are given based on the measured values without any considerations of measurement uncertainties.
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1 Identification

- **Product identifier**
- **Trade name:** Fine Tip Marker/Ultra Fine Tip Marker/Chisel Tip Marker/XI Chisel Tip Marker
- **Recommended use of the chemical and restrictions on use**
- **Application of the substance / the preparation:** Industrial Writing
-
- **Further information obtainable from:** BEIFA GROUP CO.,LTD.
-

2 Hazard(s) identification· **Classification of the substance or mixture**

Classification according to OSHA Hazard Communication Standard (29 CFR 1910.1200)



GHS02 Flame

Flammable Liquids 3

H226 Flammable liquid and vapor.



GHS08 Health hazard

Germ Cell Mutagenicity 2

H341 Suspected of causing genetic defects.



GHS05 Corrosion

Skin Corrosion 1B

H314 Causes severe skin burns and eye damage.

Eye Damage 1

H318 Causes serious eye damage.



GHS07

Acute Toxicity - Oral 4

H302 Harmful if swallowed.

Acute Toxicity - Inhalation 4

H332 Harmful if inhaled.

Sensitization - Skin 1

H317 May cause an allergic skin reaction.

Specific Target Organ Toxicity - Single Exposure 3 H336 May cause drowsiness or dizziness.

· **Information concerning particular hazards for human and environment:**

The product has to be labeled due to the calculation procedure of OSHA Hazard Communication Standard (29 CFR 1910.1200).

· **Classification system:**

The classification is according to the latest edition of OSHA Hazard Communication Standard (29 CFR 1910.1200), and extended by company and literature data.

Trade name: Fine Tip Marker/Ultra Fine Tip Marker/Chisel Tip Marker/XI Chisel Tip Marker

· **Label elements**· **Labelling according to OSHA Hazard Communication Standard (29 CFR 1910.1200)**· **Hazard pictograms**

GHS02 GHS05 GHS07 GHS08

· **Signal word** Danger· **Hazard-determining components of labeling:**

propan-1-ol

Phosphoric acid, 2-ethylhexylester

Basic Blue 4

Basic Red 1

chrysoidine

1-methoxy-2-propanol

Solvent Blue 4

Basic Yellow 37

Solvent Violet 8

· **Hazard statements**

H226 Flammable liquid and vapor.

H302+H332 Harmful if swallowed or if inhaled.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H341 Suspected of causing genetic defects.

H336 May cause drowsiness or dizziness.

· **Precautionary statements**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P260 Do not breathe dusts or mists.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing must not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.

P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a poison center/doctor.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P321 Specific treatment (see on this label).

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

P370+P378 In case of fire: Use CO₂, powder or water spray to extinguish.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Trade name: Fine Tip Marker/Ultra Fine Tip Marker/Chisel Tip Marker/XI Chisel Tip Marker

- Hazards not otherwise classified (HNOC) No further relevant information available.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:**

Mixture of the substances listed below with nonhazardous additions.

For the wording of the listed hazard statements refer to Section 16.

- **Composition:**

71-23-8 propan-1-ol	Secret
⚠ Flammable Liquids 2, H225; ⚠ Eye Damage 1, H318; ⚠ Acute Toxicity - Oral 4, H302; Specific Target Organ Toxicity - Single Exposure 3, H336	
107-98-2 1-methoxy-2-propanol	Secret
⚠ Flammable Liquids 3, H226; ⚠ Specific Target Organ Toxicity - Single Exposure 3, H336	
12645-31-7 Phosphoric acid, 2-ethylhexyl ester	Secret
⚠ Skin Corrosion 1B, H314; Eye Damage 1, H318	
1328-51-4 Solvent Blue 38	0-10%
989-38-8 Basic Red 1	0-5%
⚠ Acute Toxicity - Oral 3, H301; ⚠ Eye Damage 1, H318; ⚠ Sensitization - Skin 1, H317	
495-54-5 chrysoidine	0-3%
⚠ Germ Cell Mutagenicity 2, H341; ⚠ Acute Toxicity - Oral 4, H302; Skin Irritation 2, H315	
561-41-1 Solvent Violet 8	0-3%
⚠ Acute Toxicity - Oral 4, H302; Eye Irritation 2A, H319	
2390-60-5 Basic Blue 4	0-3%
⚠ Acute Toxicity - Oral 3, H301; Acute Toxicity - Dermal 3, H311; Acute Toxicity - Inhalation 3, H331; ⚠ Eye Irritation 2A, H319	
6358-36-7 Basic Yellow 37	0-3%
⚠ Eye Damage 1, H318	
68411-04-1 Direct Blue 264	0-3%
6786-83-0 Solvent Blue 4	0-1%
⚠ Eye Damage 1, H318; ⚠ Sensitization - Skin 1B, H317	

4 First-aid measures

- **Description of first aid measures**

- **General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- **After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing:**

Immediately call a doctor.

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

Rinse out mouth with water.

Never give anything by mouth to an unconscious person.

Seek medical treatment.

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- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture:**
During heating or in case of fire poisonous gases are produced.
- **Special protective equipment and precautions for firefighters**
- **Protective equipment:**
Mouth respiratory protective device.
Wear fully protective suit.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.
Use respiratory protective device against the effects of fumes/dust/aerosol.
Avoid contact with eyes.
Avoid contact with skin.
- **Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Ensure adequate ventilation.
Dispose contaminated material as waste according to section 13.

7 Handling and storage

- **Precautions for safe handling:**
Keep away from heat and direct sunlight.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
Avoid contact with eyes and skin.
For the general occupational hygienic measures refer to Section 8.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.

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Store in cool, dry conditions in well sealed receptacles.

8 Exposure controls/personal protection· **Control parameters**· **Components with limit values that require monitoring at the workplace:****71-23-8 propan-1-ol**PEL (USA) Long-term value: 500 mg/m³, 200 ppmREL (USA) Short-term value: 625 mg/m³, 250 ppmLong-term value: 500 mg/m³, 200 ppm

Skin

TLV (USA) Long-term value: 100 ppm

A4

107-98-2 1-methoxy-2-propanolREL (USA) Short-term value: 540 mg/m³, 150 ppmLong-term value: 360 mg/m³, 100 ppm

TLV (USA) Short-term value: 100 ppm

Long-term value: 50 ppm

A4

· **Regulatory information**

PEL (USA): Guide to Occupational Exposure Values (OSHA PELs)

REL (USA): Guide to Occupational Exposure Values (NIOSH RELs)

TLV (USA): Guide to Occupational Exposure Values (TLV)

· **Additional information:** The lists that were valid during the creation were used as basis.· **Based on the composition shown in Section 3, the following measures are suggested for occupational safety measure**· **Appropriate engineering controls:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid close or long term contact with the skin.

Avoid contact with the eyes and skin.

See Section 7 for information about design of technical facilities.

· **Personal protective equipment**· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material:**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Liquid
Color:	Red, Black, Green, Blue
Odor:	Odorless
Odor threshold:	Not available.

· pH-value: Not available.

· Change in condition

Melting point/Melting range:	Not available.
Freezing point:	Not available.
Boiling point/Boiling range:	Not available.

· Flash point: Not available.

· Flammability (solid, gaseous): Not applicable.

· Auto-ignition temperature: Not available.

· Decomposition temperature: Not available.

· Explosion limits:

Lower:	Not available.
Upper:	Not available.

· Vapor pressure: Not available.

· Density: Not available.

· Relative density: Not available.

· Vapor density: Not available.

· Evaporation rate: Not available.

· Solubility in / Miscibility with

Water: Not available.

· Partition coefficient (n-octanol/water): Not available.

· Viscosity:

Dynamic:	Not available.
Kinematic:	Not available.

· Other information: No additional information available

10 Stability and reactivity

· Reactivity: No decomposition if used according to specifications.

· Chemical stability: Stable under recommended storage conditions.

· Possibility of hazardous reactions: No dangerous reactions known.

· Conditions to avoid: No further relevant information available.

· Incompatible materials: No further relevant information available.

· Hazardous decomposition products: No dangerous decomposition products known.

Trade name: Fine Tip Marker/Ultra Fine Tip Marker/Chisel Tip Marker/XI Chisel Tip Marker

11 Toxicological information

- **Acute toxicity**
- **LD/LC50 values that are relevant for classification:**

 - 71-23-8 propan-1-ol**
Oral LD50 1,870 mg/kg (rat)
Dermal LD50 5,040 mg/kg (rabbit)
 - 989-38-8 Basic Red 1**
Oral LD50 280 mg/kg (ATE)
125 mg/kg (rat)
 - 2390-60-5 Basic Blue 4**
Oral LD50 100 mg/kg (rat)
 - 107-98-2 1-methoxy-2-propanol**
Oral LD50 5,660 mg/kg (rat)
Dermal LD50 13,000 mg/kg (rabbit)
 - 495-54-5 chrysoidine**
Oral LD50 1,650 mg/kg (rat)
- **Primary irritant effect**
- **Skin corrosion/irritation:** Caustic effect on skin and mucous membranes.
- **Serious eye damage/irritation:**
Strong caustic effect.
Strong irritant with the danger of severe eye injury.
- **Respiratory or skin sensitisation:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Corrosive
Harmful
Irritant
The product can cause inheritable damage.
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)**

989-38-8 Basic Red 1: 3
- **NTP (National Toxicology Program)**

None of the ingredients is listed.
- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information




- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Other adverse effects** No further relevant information available.

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13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **UN-Number**
- **DOT, IMDG, IATA** UN2927
- **UN proper shipping name**
- **DOT** Toxic liquids, corrosive, organic, n.o.s. (Basic Red 1, n-Propanol)
- **IMDG** TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (Basic Red 1, n-PROPANOL (PROPYL ALCOHOL, NORMAL)), MARINE POLLUTANT
- **IATA** TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (Basic Red 1, n-PROPANOL (PROPYL ALCOHOL, NORMAL))
- **Transport hazard class(es)**
- **DOT**

- **Class** 6.1 Toxic substances
- **Label** 6.1+8+3
- **IMDG**

- **Class** 6.1 Toxic substances
- **Label** 6.1/8/3
- **IATA**

- **Class** 6.1 Toxic substances
- **Label** 6.1 (8, 3)
- **Packing group**
- **DOT, IMDG, IATA** II
- **Environmental hazards** Product contains environmentally hazardous substances:
Basic Red 1
- **Marine pollutant:** Yes (DOT)
Symbol (fish and tree)
- **Special precautions for user** Warning: Toxic substances
- **EMS Number:** F-A, S-B
- **Stowage Category** B

Trade name: Fine Tip Marker/Ultra Fine Tip Marker/Chisel Tip Marker/XI Chisel Tip Marker

- **Stowage Code** SW2 Clear of living quarters.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **Transport/Additional information:**
- **DOT**
- **Quantity limitations:** On passenger aircraft/rail: 1 L
On cargo aircraft only: 30 L
- **Remarks:** Special marking with the symbol (fish and tree).
- **IMDG**
- **Limited quantities (LQ)** 100 ml
- **Excepted quantities (EQ)** Code: E4
Maximum net quantity per inner packaging: 1 ml
Maximum net quantity per outer packaging: 500 ml
- **UN "Model Regulation":** UN 2927 TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.
(BASIC RED 1, N-PROPANOL (PROPYL ALCOHOL, NORMAL)), 6.1 (8+3), II, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **Sara**
- **Section 355 (extremely hazardous substances):**
None of the ingredient is listed.
- **Section 313 (Specific toxic chemical listings):**
989-38-8 Basic Red 1
- **TSCA (Toxic Substances Control Act):**
71-23-8 propan-1-ol: ACTIVE
107-98-2 1-methoxy-2-propanol: ACTIVE
12645-31-7 Phosphoric acid, 2-ethylhexyl ester: ACTIVE
989-38-8 Basic Red 1: ACTIVE
495-54-5 chrysoidine: ACTIVE
2390-60-5 Basic Blue 4: ACTIVE
6358-36-7 Basic Yellow 37: ACTIVE
68411-04-1 Direct Blue 264: ACTIVE
6786-83-0 Solvent Blue 4: ACTIVE
- **Proposition 65**
- **Chemicals known to cause cancer:**
None of the ingredients is listed.
- **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.
- **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.
- **Chemicals known to cause developmental toxicity:**
None of the ingredients is listed.
- **New Jersey Right-to-Know List:**
71-23-8 propan-1-ol
107-98-2 1-methoxy-2-propanol
989-38-8 Basic Red 1
- **New Jersey Special Hazardous Substance List:**
71-23-8 propan-1-ol: F3
107-98-2 1-methoxy-2-propanol: F3

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Pennsylvania Right-to-Know List:71-23-8 propan-1-ol
107-98-2 1-methoxy-2-propanol
989-38-8 Basic Red 1**Pennsylvania Special Hazardous Substance List:**

989-38-8 Basic Red 1: E

Carcinogenicity categories**EPA (Environmental Protection Agency):**

None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH):

71-23-8 propan-1-ol: A4

NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients is listed.

National regulations**Additional classification according to Decree on Hazardous Materials:****REACH Regulation Annex XVII Restriction**

See Section 16 for information about restriction of use.

None of the ingredients is listed.

REACH Regulation Annex XIV Authorisation List

None of the ingredients is listed.

16 Other information**Relevant phrases**H225 Highly flammable liquid and vapor.
H226 Flammable liquid and vapor.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H336 May cause drowsiness or dizziness.
H341 Suspected of causing genetic defects.

The contents and format of this SDS are in accordance with 29 CFR 1910.1200.

DISCLAIMER OF LIABILITY:

The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

In addition, transport information of Section 14 in the report was calculated theoretically, while the results are not always consistent with Certification for Safe Transport of Chemical Goods from the officially authorized agencies. Please consult the officially authorized agencies for the accurate transport information.

Date of preparation / last revision 07/01/2024 / -**Abbreviations and acronyms:**Flammable Liquids 2: Flammable liquids – Category 2
Flammable Liquids 3: Flammable liquids – Category 3
Acute Toxicity - Oral 3: Acute toxicity – Category 3

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Acute Toxicity - Oral 4: Acute toxicity – Category 4

Skin Corrosion 1B: Skin corrosion/irritation – Category 1B

Skin Irritation 2: Skin corrosion/irritation – Category 2

Eye Damage 1: Serious eye damage/eye irritation – Category 1

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

Sensitization - Skin 1: Skin sensitisation – Category 1

Sensitization - Skin 1B: Skin sensitisation – Category 1B

Germ Cell Mutagenicity 2: Germ cell mutagenicity – Category 2

Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3

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