Material Safety Data Sheet

Section 1: Identification

Product name: Specimen Dissolving Agent **Synonyms:** /
Product code: DSV10
(M)SDS No.: 2405
Recommended use: Cold mounting for metallographic specimen preparation
Restrictions on use: For laboratory use only
Emergency telephone number: 13814829868（24h）
Manufacturer / Supplier: Trojan (Suzhou) Materials Technology Co., Ltd.
Address: Building 26, No. 228, Gongtang Road, Luzhi Town, Wuzhong District, Suzhou, Jiangsu Province, China
Post code: 215000 **Fax :** 0512-67508229
Telephone: 0512-67580617
E-mail: sales@trojanchina.com

Section 2: Hazard Identification

Classification according to GHS:

Flammable liquids	Category 3	（H226）
Skin irritation	Category 2	（H315）
Skin sensitisation	Category 1	（H317）

Label elements



Signal word: Danger
Hazard statements:

- H226 – Flammable liquid and vapour.
- H315 – Causes skin irritation.
- H317 – May cause an allergic skin reaction.

Precautionary statements:
Prevention:

- Keep away from heat, sparks, open flames and hot surfaces.
- No smoking.
- Keep container tightly closed.

Response

- Evacuate personnel to a safe area.
- Isolate the hazard area and restrict access.
- Remove all ignition sources immediately.
- IF ON SKIN: Wash with plenty of water and soap.

Storage

- Store in a well-ventilated, cool, and dry place.
- Protect from sunlight.
- Keep away from ignition sources.

Disposal

- Dispose of contents/container in accordance with local, regional, national and international regulations.

Supplemental information
UN Dangerous Goods Classification:
Class 3 – Flammable liquids

Section 3: Composition / Information on Ingredients

Mixture		
Component	Concentration (% w/w)	CAS No.
Paraffin wax	1-2 %	8002-74-2
Kerosene	10-20 %	8008-20-6
Dichloromethane	60-70 %	75-09-2
2-Butoxyethanol	5-10 %	111-76-2

SECTION 4: First-aid Measures

General advice：Immediate medical attention is required.Show this Safety Data Sheet to the physician in attendance.

If inhaled

- Move the exposed person to fresh air.
- If symptoms occur, seek medical advice immediately.
- If not breathing, provide artificial respiration.
  Use a pocket mask with a one-way valve or suitable respiratory medical device; **avoid mouth-to-mouth resuscitation** if the material has been inhaled or ingested.
- If breathing is difficult, administer oxygen by trained personnel.

Skin contact

- Immediately remove contaminated clothing and shoes.
- Wash with plenty of soap and water.
- May cause skin sensitisation in susceptible individuals.
- If skin irritation or allergic reaction occurs, seek medical attention.

Eye contact

- Rinse cautiously with plenty of water for at least **15 minutes**, lifting upper and lower eyelids.
- Do not rub the affected eye.
- Remove contact lenses if present and easy to do.
- Continue rinsing.
- If irritation persists or worsens, obtain medical attention.

If swallowed

- Do **not** induce vomiting.
- Rinse mouth with water and drink plenty of water afterwards.
- Never give anything by mouth to an unconscious person.

Protection of first-aid responders

- Remove all ignition sources.
- Avoid exposure to vapours or smoke.
- Ensure responders are aware of the material involved and take precautions to avoid contamination.
- Wear appropriate personal protective equipment (PPE) including gloves, protective clothing and respiratory protection.
- Use a pocket mask with a one-way valve; avoid mouth-to-mouth resuscitation.

Most important symptoms and effects, both acute and delayed

- Itching, rash, burning sensation
- Coughing, wheezing, shortness of breath
- Allergic skin reactions in sensitised individuals

Notes to physician

- Treat symptomatically.
- Sensitisation reactions may occur in susceptible individuals.

SECTION 5: Fire-fighting Measures

Suitable extinguishing media

- Dry sand
- Carbon dioxide (CO_2)
- Foam

Specific hazards arising from the substance or mixture

- Flammable; may ignite when exposed to open flame or high heat.
- Reacts with strong oxidising agents.
- Containers may build up pressure and **rupture/explode** when exposed to heat.

Hazardous combustion products

- Carbon monoxide
- Carbon dioxide
- Hydrogen chloride
- Phosgene

SECTION 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

- Evacuate personnel to a safe area.
- Use appropriate personal protective equipment.
- Avoid contact with skin, eyes and clothing.
- Ensure adequate ventilation.
- Stay upwind of the spill.
- Do not breathe vapours or fumes.

Environmental precautions

- Prevent further leakage if safe to do so.
- Do not allow product to enter drains or waterways.

Methods and materials for containment and cleaning up

Containment

- Stop the leak if safe to do so.
- Do not touch or walk through spilled material.
- Use vapour-suppressing foam to reduce vapours.
- Dike far ahead of the spill to collect contaminated runoff.
- Keep away from drains, sewers, ditches and watercourses.

Clean-up

- Take precautionary measures against static discharge.
- Contain spillage and absorb with inert absorbent material.
- Collect the absorbed material and transfer to properly labelled containers for disposal.

SECTION 7: Handling and Storage

Precautions for safe handling

- Use personal protective equipment (PPE) to avoid contact with skin and eyes.
- Keep away from heat, sparks, open flames and hot surfaces. **No smoking.**
- Use grounding and bonding during transfer to prevent static discharge, fire or explosion.
- Use non-sparking tools and explosion-proof equipment.
- Handle only in closed systems or provide adequate local exhaust ventilation.
- Do not eat, drink or smoke when using this product.
- Avoid breathing vapours or mists.
- Remove contaminated clothing and wash before reuse.
- Follow good industrial hygiene and safety practices.
- When opening tightly sealed containers, **vent slowly to release built-up pressure before full opening**.
- Store and handle the product in areas equipped with fire-sprinkler systems where possible.

Conditions for safe storage, including any incompatibilities

- Store in a **cool, well-ventilated** place.
- Keep away from heat sources, open flames, sparks and hot surfaces.
- Recommended storage temperature: **≤ 30°C**; relative humidity **≤ 80%**.
- Keep container tightly closed when not in use.

- Store separately from alkali metals and food chemicals.
- Avoid mixed storage wit h incompatible substances.
- Protect from sunlight.
- Store in approved flammable-liquid storage rooms or cabinets where required.

Specific end use

- Laboratory use for metallographic cold mounting.

SECTION 8: Exposure Controls

Control parameters

Occupational Exposure Limits (China GBZ 2.1–2019)

(If workplace uses local regulatory limits, list them below.)

Component	CAS	Standard	Limits
Paraffin wax	8002-74-2	GBZ 2.1—2019	MAC: PC-TWA: PC-STEL:
Kerosene	8008-20-6	GBZ 2.1—2019	MAC: PC-TWA: PC-STEL:
Dichloromethane	75-09-2	GBZ 2.1—2019	MAC: PC-TWA: PC-STEL:
2-Butoxyethanol	11-76-2	GBZ 2.1—2019	MAC: PC-TWA: PC-STEL:

Exposure controls

Engineering controls

- Avoid any direct contact with the substance.
- Conduct operations in closed systems to prevent leakage.
- Provide adequate general and local exhaust ventilation.
- Install automatic alarm systems and emergency ventilation where necessary.
- Provide emergency escape routes and designated spill-control zones.
- Keep work area separated from incompatible operations.
- Mark hazardous zones with red warning lines and warning signs.
- Provide safety shower and eyewash stations.
- Prohibit smoking, eating or drinking in the work area.
- Shower and change clothes after work.

Individual protection measures

Respiratory protection

- When airborne concentrations exceed occupational limits, use a **half-mask respirator with appropriate organic vapour cartridges**.

- Use respiratory protection if ventilation is inadequate.

Hand protection

- Wear suitable chemical-resistant gloves (e.g., latex or equivalent).
  (If you want, I can replace with nitrile gloves which are more internationally standard.)

Eye protection

- Safety goggles; eye protection combined with respiratory protection if necessary.

Skin and body protection

- Wear chemical-resistant protective clothing to prevent skin contact.

SECTION 9: Physical and Chemical Properties

Property	Value
Appearance	Transparent to semi-transparent liquid; characteristic odor; free of impurities
pH	Not applicable
Melting point	–96 °C
Relative density (H_2O = 1)	1.063
Boiling point / range	> 35 °C
Flash point	33 °C
Explosion limits	Lower: 1.7% (v/v); Upper: 18% (v/v)
Vapor pressure	Not available
Solubility	Insoluble in water; miscible with benzene and a limited number of organic solvents
Odor	Characteristic
Main use	Removal of non-curing paint films (for cold mounting / specimen cleaning)

SECTION 10: Stability and Reactivity

Reactivity: No hazardous reactivity expected under normal conditions.

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: No hazardous polymerisation expected.

Conditions to avoid

- Heat, sparks, open flames
- Direct sunlight
- Exposure to rain or moisture

Incompatible materials

- Strong oxidising agents
- Strong reducing agents
- Acids
- Alkali metals

Hazardous decomposition products

None under normal conditions of use.

SECTION 11: Toxicological Information

Information on likely routes of exposure

- Inhalation
- Skin contact
- Eye contact
- Ingestion

Inhalation

No specific mixture test data available.

May cause respiratory tract irritation.

Toxic if inhaled based on component data.

Skin contact

No mixture-specific test data.

Causes skin irritation.

Prolonged contact may cause redness and discomfort.

May cause allergic skin reactions in sensitised individuals.

Eye contact

No mixture-specific test data.

Causes eye irritation based on component data.

May cause redness, itching and pain.

Ingestion

No mixture-specific test data.

May cause gastrointestinal irritation, nausea, vomiting or diarrhea.

Symptoms

Itching, rash, redness, burning sensation.

Eye redness or tearing, coughing, wheezing, shortness of breath.

Acute toxicity data (based on components)

- **LD_{50} (mouse, intraperitoneal):** 1490 mg/kg
- **LD_{50} (rabbit, dermal):** 11,300 mg/kg
- **LC_{50} (rat, inhalation, 4 h):** 19,689 mg/m³

Chronic/long-term effects

- **Skin corrosion/irritation:** Causes skin irritation (based on component data).
- **Serious eye damage/eye irritation:** Causes eye irritation.
- **Respiratory or skin sensitisation:** Skin sensitiser.
- **Germ cell mutagenicity:** No data available.
- **Carcinogenicity:** No mixture data; some components (e.g., dichloromethane) are classified as Carc. 2.
- **Reproductive toxicity:** No data available.

- **STOT — single exposure:** May cause respiratory irritation.
- **STOT — repeated exposure:** No data available.
- **Aspiration hazard:** No data available for the mixture.

SECTION 12: Ecological Information

Ecotoxicity
Slightly hazardous to water.
Avoid release of large quantities into groundwater, watercourses or sewage systems.

Persistence and degradability: Expected to be readily degradable.

Bioaccumulative potential: Not expected to bioaccumulate.

Mobility in soil: No data available.

Other adverse effects
Do not allow untreated chemicals to enter water or soil.
Rinsing by rainwater may remove material due to moderate degradability.

SECTION 13: Disposal Considerations

Waste treatment methods
Chemical residues are generally considered special waste.
Dispose of unused product, contaminated materials and containers in accordance with national and local regulations.
Consult authorised waste disposal contractors for recommended disposal methods.

Disposal notes

- Classified as hazardous waste.
- Must be handled and disposed of according to governmental regulations.
- Do not discharge into wastewater systems without proper neutralisation and dilution (subject to regulatory approval).

SECTION 14: Transport Information

Proper Shipping Name: No special regulations for container <110 gal

UN Number: UN 1993

UN Proper Shipping Name: Flammable liquid, n.o.s.

Transport hazard class: Class 3 — Flammable liquid

Packing group: III

Environmental hazards

- Marine pollutant (IMDG): **No**
- Environmentally hazardous substance: **No**

Special precautions for user

- Handle with care during transport.
- Avoid impact, dropping or damage to containers.

• Prevent leakage and exposure to ignition sources.
Transport in bulk according to MARPOL 73/78 and the IBC Code Not applicable.

Others：

IMDG/IMO	
Item	Description
UN Number	UN 1993
Proper Shipping Name	Flammable liquid, n.o.s.
Class	3
Packing Group	III
Marine Pollutant	No
EmS Code	F-E, S-E
ADR / RID	
Item	Description
UN Number	UN 1993
Proper Shipping Name	Flammable liquid, n.o.s.
Class	3
Packing Group	III
Classification Code	F1
Tunnel Restriction Code	(D/E)
IATA (Air Transport)	
Item	Description
UN Number	UN 1993
Proper Shipping Name	Flammable liquid, n.o.s.
Class	3
Packing Group	III

SECTION 15: Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

This product is subject to the following regulations in **China:**

- **Regulations on the Safe Management of Hazardous Chemicals**

  (Promulgated by the State Council of the People's Republic of China)
- **Regulations on the Safe Use of Chemicals in the Workplace**

  (Ministry of Labour, PRC)
- Relevant national and local regulations concerning the **safe use, production, storage, transportation, handling and disposal** of hazardous chemicals.

The user must comply with all applicable national and local laws and regulations.

SECTION 16: Other Information

References	Information provided by the supplier and publicly available regulatory data.	
Preparation details	**Prepared by:** Trojan (Suzhou) Materials Technology Co., Ltd.	
	Address / Tel: No. 228, Gongtang Road, Building 26, Luzhi Town, Wuzhong District, Suzhou, China Tel: +86-512-67580617	
Prepared by	Name: Zhang Huajian	Title: **Manager**
Date of preparation	2026-09-01	