



Safety Data Sheet

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

Product identifier:

Product name: Turbidity standard solution (1000)

SDS No. : J4287E-4

Relevant identified uses of the substance or mixture and uses advised against

Research and Development

Details of the supplier of the safety data sheet

Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.

Address: 3-1, Honmachibashi, Chuo-ku, Osaka, JAPAN

Division: Chemical Safety Management Department

Telephone number: +81-6-6946-8061

FAX: +81-6-6946-1607

Section 2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

HEALTH HAZARDS

Skin sensitization: Category 1

Carcinogenicity: Category 1A

(Note) GHS classification without description: Not classified/Classification not possible

Label elements



Signal word: Danger

HAZARD STATEMENT

H317 May cause an allergic skin reaction

H350 May cause cancer

PRECAUTIONARY STATEMENT

Prevention

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

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

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

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

Response

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

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

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

P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage

P405 Store locked up.

Disposal

P501 Dispose of contents/container in accordance with local/national regulation.

Specific adverse human health effects



See "11. Toxicological Information".

Section 3. Composition/information on ingredients

Mixture/Substance selection:

Mixture

Ingredient name	Content (%)	CAS No.	ENCS	Chemical formula
Formaldehyde	0.40	50-00-0	2-482	CH ₂ O
Kaolin	0.10	1332-58-7	-	-
Methanol	≤0.094	67-56-1	2-201	CH ₃ OH
Water	99	7732-18-5	-	H ₂ O

Note : The figures shown above are not the specifications of the product. The content of products may exceed the figures shown above.

Section 4. First-aid measures

Descriptions of first-aid measures

General measures

IF exposed or concerned: Get medical advice/attention.

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor/physician if you feel unwell.

IF ON SKIN

Take off immediately all contaminated clothing. Rinse skin with water or shower.

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.

If eye irritation persists: Get medical advice/attention.

IF SWALLOWED

Rinse mouth.

Call a POISON CENTER/doctor/physician if you feel unwell.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

Specific hazards arising from the substance or mixture

Fire may produce irritating, corrosive and/or toxic gases.

Runoff from fire control or dilution water may cause pollution.

See "10.Stability and Reactivity".

Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

**Special protective equipment and precautions for fire-fighters**

Wear fire resistant or flame retardant clothing.

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

Firefighters should wear self-contained breathing apparatus with a full facepiece operated in the positive pressure mode.

Section 6. Accidental release measures**Personnel precautions, protective equipment and emergency procedures**

Keep unauthorized personnel away.

Ventilate area until material pick up is complete.

Wear proper protective equipment.

Environmental precautions

Prevent spills from entering sewers, watercourses, low areas or rivers. To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

Preventive measures for secondary accident

Collect spillage.

Section 7. Handling and storage**Precautions for safe handling****Preventive measures**

(Exposure Control for handling personnel)

Do not breathe dust/fume/gas/mist/vapors/spray.

(Protective measures against fire and explosion)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(Exhaust/ventilator)

Exhaust/ventilator should be available.

(Safety treatments)

Avoid contact with skin.

Avoid contact with eyes.

Safety Measures

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

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

Wash hands et al thoroughly after handling.

When using do not eat, drink or smoke.

Any incompatibilities

See "10.Stability and Reactivity".

Advice on general occupational hygiene

Contaminated work clothing should not be allowed out of the workplace.

Take off contaminated clothing and wash it before reuse.

Storage**Conditions for safe storage**

Keep container tightly closed.

Store locked up. (P405)

Store in a cool, dry place. Do not store in direct sunlight.



Storage in accordance with local/national regulation.
Container and packaging materials for safe handling
Use closed unbreakable containers.

Section 8. Exposure controls/personal protection**Control parameters****Control value and Concentration standard value**

(Formaldehyde)

Japan control value 0.1ppm

(Methanol)

Japan control value 200ppm

Adopted value

(Formaldehyde)

JSOH(2007) 0.1ppm, 0.12mg/m³; (ceiling) 0.2ppm, 0.24mg/m³

(Methanol)

JSOH(1963) 200ppm; 260mg/m³

(Formaldehyde)

ACGIH(2017) TWA: 0.1ppm;

STEL: 0.3ppm (URT & eye irr; URT cancer)

(Kaolin)

ACGIH(1996) TWA: 2mg/m³(E,R) (Pneumoconiosis)

(Methanol)

ACGIH(2009) TWA: 200ppm;

STEL: 250ppm (Headache; eye dam; dizziness; nausea)

[ACGIH] Notation

(Formaldehyde)

DSEN; RSEN

(Methanol)

Skin

Exposure controls**Appropriate engineering controls**

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Individual protection measures

Recommend to use protective equipment in conformity with the standards.

Use appropriate protective equipment in accordance with local/national regulation.

Respiratory protection

Wear respiratory protection (dust-proof mask/gas mask). Select chemical cartridge corresponding to type of gases when using a gas mask.

Hand protection

Wear impervious protective glove.

Eye protection

Wear eye/face protection. Wear safety goggles in cases gas is generated.

Skin and body protection

Wear protective clothing.



Section 9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state: Liquid

Color: Milky white

Odor data is not available.

Melting point/Freezing point data is not available.

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

Flammability (gases, liquids and solids) data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Flash point data is not available.

Auto-ignition temperature data is not available.

Decomposition temperature data is not available.

pH data is not available.

Kinematic viscosity data is not available.

Solubility:

Solubility in water: Soluble

Solubility in solvent data is not available.

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density: 1.0

Relative vapor density (Air=1) data is not available.

Particle characteristics data is not available.

Other information

Other information is not available.

Section 10. Stability and Reactivity

Reactivity

Not available.

Chemical stability

Stable under normal storage/handling conditions.

Possibility of hazardous reactions

(Formaldehyde)

The gas mixes well with air, explosive mixtures are easily formed.

The substance polymerizes in contact with alkalies and if dissolved in water. Upon heating, toxic fumes are formed. Reacts violently with strong oxidants, strong acids and strong bases. This generates explosion hazard. (ICSC 0275)

(Methanol)

The vapour mixes well with air, explosive mixtures are easily formed.

Reacts violently with strong oxidants, acids and reducing agents. This generates fire and explosion hazard. (ICSC 0057)

Conditions to avoid

Contact with incompatible materials.

Contact with fire source.

Incompatible materials

Acids, Strong bases, Strong oxidizing agents, Reducing agents

Hazardous decomposition products

Carbon oxides, Aluminum compounds



Section 11. Toxicological Information

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[Data for components of the product]

[NITE-CHRIP]

(Formaldehyde)

rat LD50: 600 – 700 mg/kg (test substance: 2 – 4% Aqueous solution) (source: NITE)

(Methanol)

human LD50: ca. 1400 mg/kg (source: NITE)

Acute toxicity (Dermal)

[Data for components of the product]

[NITE-CHRIP]

(Formaldehyde)

rabbit LD50: 270 mg/kg (test substance: Formalin) (source: NITE)

(Methanol)

rabbit LD50: 15800 mg/kg (source: NITE)

Acute toxicity (Inhalation)

[Data for components of the product]

[NITE-CHRIP]

(Formaldehyde)

gas: rat LC50: 480 ppm (4-hour) (source: NITE)

(Methanol)

vapor: rat LC50: > 22500 ppm (converted 4-hour equivalent value: > 31500 ppm) (source: NITE)

Irritant properties

Skin corrosion/irritation

[Data for components of the product]

[NITE-CHRIP]

(Formaldehyde)

Category 1 (source: NITE)

Serious eye damage/irritation

[Data for components of the product]

[NITE-CHRIP]

(Formaldehyde)

Category 2 (source: NITE)

(Methanol)

Category 2 (source: NITE)

Sensitization

Respiratory sensitization

[Data for components of the product]

[NITE-CHRIP]

(Formaldehyde)

Category 1 (source: NITE)

Skin sensitization

[Product]

Category 1, May cause an allergic skin reaction

[Data for components of the product]

[NITE-CHRIP]

(Formaldehyde)



Category 1A (source: NITE)

Mutagenic effects data is not available.

Carcinogenicity

[Product]

Category 1A, May cause cancer

[Data for components of the product]

[NITE-CHRIP]

(Formaldehyde)

Category 1A (source: NITE)

[IARC]

(Formaldehyde)

Group 1 : Carcinogenic to humans

[ACGIH]

(Formaldehyde)

A1(2017) : Confirmed Human Carcinogen

(Kaolin)

A4(1996) : Not Classifiable as a Human Carcinogen

[NTP]

(Formaldehyde)

Known : Known to be Human Carcinogens

[EU]

(Formaldehyde)

Category 1B; Substances presumed to have carcinogenic potential for humans

Reproductive toxicity data is not available.

Specific target organ toxicity (STOT)

STOT-single exposure

[Data for components of the product]

[NITE-CHRIP]

(Methanol)

Category 3 (Narcotic effects) (source: NITE)

STOT-repeated exposure data is not available.

Aspiration hazard data is not available.

Section 12. Ecological Information

Toxicity

Aquatic toxicity

[Data for components of the product]

Hazardous to the aquatic environment, short-term (acute)

[NITE-CHRIP]

(Formaldehyde)

Algae (*Desmodesmus subspicatus*) 72-hour ErC50: 4.89 mg a.i./L (a.i.: active ingredient)

(source: NITE)

(Methanol)

Fish (Bluegill) 96-hour LC50: 15400 mg/L (source: NITE)

Crustacea (Brown shrimp) 96-hour LC50: 1340 mg/L (source: NITE)

Hazardous to the aquatic environment, long-term (chronic)

[NITE-CHRIP]

(Formaldehyde)

Crustacea (*Ceriodaphnia dubia*) 7-day NOEC: 1.0 mg/L (source: NITE)

**Water solubility**

(Formaldehyde)

not poorly water-soluble (400000 mg/L) (source: NITE)

(Kaolin)

insoluble (source: ICSC, 2016)

(Methanol)

not poorly water-soluble (1000000 mg/L) (source: NITE)

Persistence and degradability

[Data for components of the product]

(Formaldehyde)

Rapidly degradable (Degradation rate: 87 – 96% (by BOD)) (source: NITE)

Bioaccumulative potential

[Data for components of the product]

(Formaldehyde)

log Kow: 0.35 (source: NITE)

(Methanol)

log Pow: -0.74 (source: ICSC, 2018)

Mobility in soil

Mobility in soil data is not available.

Other adverse effects

Ozone depleting chemical data is not available.

Section 13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

Waste treatment methods

Dispose of contents/container as industrial waste. Accordance with local/national regulation.

Section 14. Transport Information

UN Number or ID Number : Not regulated

IMDG Code (International Maritime Dangerous Goods Regulations)

UN Number or ID Number : Not regulated

IATA (Dangerous Goods Regulations)

UN Number or ID Number : Not regulated

Environmental hazards

Marine pollutants (yes/no) : no

Section 15. Regulatory Information

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

U.S. Toxic Substances Control Act (TSCA) Inventory

Chemicals listed in TSCA Inventory

Formaldehyde; Methanol; Kaolin; Water

Other regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.



Section 16. Other information

References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 22nd edit., 2021 UN
IMDG Code, 2022 Edition (Incorporating Amendment 41-22)
IATA Dangerous Goods Regulations (65th Edition) 2024
2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT)
2024 TLVs and BEIs. (ACGIH)
JIS Z 7252 : 2019
JIS Z 7253 : 2019
2023 Recommendation on TLVs (JISOH)
Supplier's data/information

General Disclaimer

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Unauthorized translation or modification is prohibited.

Please provide SDS to customers for selling or transferring.

All chemicals have unknown hazard. Handle the product with care.

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Data published in Japan (National Institute of Technology and Evaluation (NITE) Chemical Risk Information Platform (NITE-CHRIIP), up to FY2023).