

Safety Data Sheet

1. Product and company identification

Product name : AQUALYTE Water Standard 1
Part No. : D312139-1
Name of manufacturer : HIRANUMA Co., Ltd.
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2. Summary of danger and Hazard

GHS classification

Physical and chemical hazard

Flammable liquids : Category 3

Human health hazard

Serious eye damage/eye irritation
: Category 2B

Reproductive toxicity
: Category 2

Environmental hazard

Aquatic acute : Category 3

Aquatic chronic : Category 3

Pictograms or symbols



Signal word : Warning

Hazard statements : Flammable liquid and vapor

Causes eye irritation

Suspected of damaging fertility or the unborn child

Harmful to aquatic life

Harmful to aquatic life with long lasting effects

Precautionary statements

- Prevention : Do not handle until all safety precautions have been read and understood.
 Keep away from ignition sources such as heat, sparks, or open flame.
 Keep containers tightly closed.
 Ground container and receiving equipment in case of transport and stirring.
 Use explosion-proof apparatus.
 Use only non-sparking tools.
 Avoid release to the environment.
 Wear appropriate protective gloves, glasses, clothing, face shield, or mask.
- Response : If in eyes : Rinse cautiously with water for several minutes.
 Get medical treatment.
 If on skin : Remove contaminated clothing and the substance.
 Wash with plenty of water.
 Wash hands thoroughly after handling.
 If exposed or concerned, get medical treatment.
- Storage : Store in a cool and well-ventilated area.
 Store locked up.
- Disposal : Dispose of contents and containers appropriately in accordance with related regulations.

3. Composition/Information on ingredients

Distinction of substance or mixture

: Mixture

Chemical name	Concentration (%)	Formula	TSCA	EC-No.	CAS RN
Anisole	90.5	CH ₃ OC ₆ H ₅	Listed	202-876-1	100-66-3
Diethylene glycol dimethyl ether	9.5	(CH ₃ OCH ₂ CH ₂) ₂ O	Listed	203-924-4	111-96-6

4. First aid measures

- Inhalation : Remove the victim to fresh air, and make him blow his nose and gargle.
- Skin contact : Wash the affected areas under running water.
- Eye contact : Wash the affected areas under running water for at least 15 minutes. Get medical treatment.

Ingestion : Give the victim water or salt water and make him vomit. Get medical attention.

Protection for first aid person : Savers wear proper protective equipment like rubber gloves, goggles.

5. Fire fighting measures

Extinguishing media : Dry chemical powder, carbon dioxide, dry sand, foam

Prohibited extinguishing media : Water spray

Particular fire fighting : Move containers from fire area if it can be done without risk, if not possible, apply water from a safe distance to cool and protect surrounding area.
Conduct operations from upwind.
Dry chemical powder, carbon dioxide or dry sand should be used for small fires. Foam extinguisher is effective for a large scale fire.

Protection for firefighters : Firefighters should wear protective equipment.

6. Accidental release measures

Cautions for personnel : Wear proper equipment and avoid contact with skin and inhalation of vapor. Conduct operations from upwind and evacuate people downwind. Shut off all sources of ignition. Keep away personnel except for authorized ones from spillage area by stretching ropes.

Cautions for environment : Attention should be given not to cause damage to the environment by flowing of spillage to rivers.

Methods and Equipment for Containment and Cleaning up

For containment : Absorb spill with inert material (e.g., diatomaceous earth, sand) and flush residual area with copious amounts of water.

Prevention of second accident : Remove nearby sources of ignition and prepare extinguishing media.

7. Cautions of handling and storage

Handling

Engineering measures

: Wear proper protective equipment not to contact with skin or inhale the vapor. Pay attention to fire.

Cautions for safety handling

: Use with an enclosed system or a local exhaust ventilation.

Storage

Adequate storage condition

: Store in a dark, cool place and tightly closed.

Safety adequate container materials

: Glass, fluorine resin, stainless steel

8. Exposure control/Personal protection

Anisole	ACGIH TWA : Not established
Diethylene glycol dimethyl ether	ACGIH TWA : Not established

Engineering measures

: Use only with adequate ventilation and in closed systems.

Protective equipment

Respiration protective equipment

: If necessary, wear chemical cartridge respirator with an organic vapor cartage

Hands protective equipment

: Organic solvents resistant gloves

Eyes protective equipment

: Safety goggles

Skin and body protective equipment

: Protective clothing, protective boots

9. Physical and chemical properties

Appearance : Liquid
 Color : Colorless
 Odor : Aromatic odor
 pH : No data available
 Melting point : -37.3 °C(as anisole)
 Freezing point : No data available
 Boiling point : 153.75 °C(as anisole)
 Flash point : 51.7 °C(as anisole)

Auto-ignition temperature
: 475 °C(as anisole)

Decomposition temperature
: No data available

Flammability : No data available

Vapor pressure : 1.33hPa (20 °C)(as anisole)

Relative density : No data available

Density : 0.99g/cm³ (20 °C)

Relative gas density : No data available

Solubility : Water : Insoluble
Organic solvents : Soluble in acetone, ethanol.

Partition coefficient n-octanol/water (log Pow)
: 2.11 (as anisole)

Explosive limits (vol %)
: 0.3 - 6.3 vol % (as anisole)

Viscosity, kinematic : No data available

Particle characteristics
: No data available

10. Stability and reactivity

Reactivity : May react with oxidizing substances.

Chemical stability : Stable under normal usage.

Possibility of hazardous reactions
: Stable under normal conditions of use.

Conditions to avoid : Light, heat

Incompatible materials : Oxidizing substances

Hazardous decomposition products
: Carbon monoxide

11. Toxicological information

Acute toxicity (oral) : No classification
(as anisole)
rat LD50=3700mg/kg
(as diethylene glycol dimethyl ether)
rat LD50=4760mg/kg

Acute toxicity (dermal)
: Classification not possible

Acute toxicity (inhalation)
: Classification not possible (vapor, dust, mist)

(as diethylene glycol dimethyl ether)

rat LC50=24mg/L/4H(as mist)

Skin corrosion/irritation

: Although diethylene glycol dimethyl ether was classified out of category. but there is no data of Anisole, so it is impossible to classify.

Serious eye damage/eye irritation

: Causes eye irritation

As the diethylene glycol dimethyl ether causes mild irritation of rabbit eyes, the classification is set in category 2B.

Respiratory sensitization

: Classification not possible

Skin sensitization

: Classification not possible

Although diethylene glycol dimethyl ether was classified out of category. but there is no data of anisole, so it is impossible to classify.

Germ cell mutagenicity

: Classification not possible

Although diethylene glycol dimethyl ether was classified out of category. but there is no data of anisole, so it is impossible to classify.

Carcinogenicity

: Classification not possible

Reproductive toxicity : Suspected of damaging fertility or the unborn child

There was no data about anisole. but diethylene glycol dimethyl ether has following data: decrease in fertility was observed in reproduction test by inhalation exposure of male rats, and rate of deformation of offspring was low, but increase in resorption of fetuses was observed at developmental toxicity test by inhalation exposure (100% at 400ppm) in organogenesis period of rats.

Deformation of fingers and legs of offspring, exencephaly, malformation of bones were observed at the dose causing death of parent animals in developmental toxicity test by oral administration in organogenesis period of mice, moreover resorption of fetuses and deformation of bones were observed at the dose causing toxicity of parent animals in reproduction test using rabbits. From the above results, it was classified into category 2.

Specific target organ toxicity (single exposure)

: Classification not possible
Specific target organ toxicity (repeated exposure)
: Classification not possible
Aspiration hazard : Classification not possible

12. Ecological information

Ecotoxicity

Aquatic acute : Harmful to aquatic life
Aquatic chronic :
Harmful to aquatic life with long lasting effects
(as anisole)
Cruatacea (Daphnia magna) EC50=11.05mg/L/24H

Persistence and degradability

: Anisole and diethylene glycol dimethyl ether have high
biodegradability.
(as anisole) BOD : 56%

Bioaccumulative potential

: No data available

Mobility in soil : No data available

Hazardous to the ozone layer

: Classification not possible

13. Disposal consideration

Residual disposal : Burn in a chemical incinerator equipped with an afterburner
and a scrubber. Or entrust approved waste disposal companies
with the disposal.

Containers : In case of disposal of empty bottles, dispose bottles after
removing the content thoroughly.

14. Transport information

International Regulations

Transport by sea (IMDG)

UN No. (IMDG) : 2222
Proper shipping name (IMDG)
: ANISOLE

Packing group (IMDG)

: III

Transport hazard class(es) (IMDG)

: 3

Air transport (IATA)

UN No. (IATA) : 2222

Proper shipping name (IATA)

: Anisole

Packing group (IATA)

: III

Transport hazard class(es) (IATA)

: 3

Marine pollutant : Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Pollutant category : No information available

MFAG-No : 128

15. Regulatory information

Regulatory information with regard to this substance in your country or region should be examined by your own responsibility.

16. Other information

References

1) Company data on file

2) NITE Chemical Risk Information Platform (NITE CHRIP), National Institute of Technology and Evaluation.

* The information contained herein is based on several references and the present state of our knowledge. However the SDS does not always cover all information about the product, handle the product carefully. The information is intended to ordinary usage, in case of particular handlings, conduct appropriate safety measurements. The information herein is only provision of information, and it does not represent a guarantee the properties of the product. The Safety Data Sheet(SDS) is prepared based on JIS Z7253.