



## Safety Data Sheet

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

Product identifier:

Product name: Gram-Hucker solution I

SDS No. : E0161E-2

Details of the supplier of the safety data sheet

Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.

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

Division: Safety Management Dept. of Chemicals

Telephone number: +81-6-6946-8061

FAX: +81-6-6946-1607

e-mail address: kagakuhinanzenkanri@kishida.co.jp

### 2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

PHYSICAL AND CHEMICAL HAZARDS

Flammable liquids: Category 3

HEALTH HAZARDS

Serious eye damage/eye irritation: Category 2

Carcinogenicity: Category 1A

Reproductive toxicity: Category 1A

Specific target organ toxicity – repeated exposure: Category 1(liver)

Specific target organ toxicity – repeated exposure: Category 2(CNS)

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

Label elements



Signal word: Danger

HAZARD STATEMENT

Flammable liquid and vapor

Causes serious eye irritation

May cause cancer

May damage fertility or the unborn child

Causes damage to organs through prolonged or repeated exposure(liver)

May cause damage to organs through prolonged or repeated exposure(CNS)

PRECAUTIONARY STATEMENT

Prevention

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

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

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

Wash contaminated parts thoroughly after handling.

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



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

**Response**

In case of fire: Use appropriate media other than water for extinction.

Get medical advice/attention if you feel unwell.

IF exposed or concerned: Get medical advice/attention.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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.

**Storage**

Store in a well-ventilated place. Keep cool.

**Disposal**

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

**Specific Physical and Chemical hazards**

Flammable liquid. Vapor/air mixture may explode.

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**3. Composition/information on ingredients****Mixture/Substance selection:****Mixture**

Ingredient name:Ethanol

Content (%):14

Chemical formula:C<sub>2</sub>H<sub>5</sub>OH

Chemicals No, Japan:2-202

CAS No.:64-17-5

MW:46.07

ECNO:200-578-6

Ingredient name:C.I. Basic Violet 3

Content (%):1.5

Chemical formula:C<sub>25</sub>H<sub>30</sub>N<sub>3</sub>Cl

Chemicals No, Japan:5-1971

CAS No.:548-62-9

MW:407.99

ECNO:208-953-6

Ingredient name:Ammonium oxalate

Content (%):0.73

Chemical formula:C<sub>2</sub>H<sub>8</sub>N<sub>2</sub>O<sub>4</sub>

Chemicals No, Japan:1-391; 2-844

CAS No.:1113-38-8

MW:124.1

ECNO:214-202-3

Ingredient name:Water

Content (%):83

Chemical formula:H<sub>2</sub>O

CAS No.:7732-18-5

MW:18.02

ECNO:231-791-2

Note : The figures shown above are not the specifications of the product.



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#### 4. First-aid measures

##### Descriptions of first-aid measures

###### General measures

Get medical attention/advice if you feel unwell.

###### IF INHALED

Remove person to fresh air and keep comfortable for breathing.

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

###### IF ON SKIN (or hair)

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

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 or doctor/physician if you feel unwell.

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#### 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

Containers may explode when heated.

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

##### Advice for firefighters

###### Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

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

Wear fire/flame resistant/retardant clothing.

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

Firefighters should wear self-contained breathing apparatus with full face piece operated positive pressure mode.

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#### 6. Accidental release measures

##### Personnel precautions, protective equipment and emergency procedures

Ventilate area until material pick up is complete.

Wear proper protective equipment.

##### Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

##### 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.



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## 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/sparks/open flames/hot surfaces. – No smoking.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

(Exhaust/ventilator)

Exhaust/ventilator should be available.

(Safety treatments)

Avoid contact with skin.

Avoid contact with eyes.

#### Safety Measures

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

When using do not eat, drink or smoke.

#### Any incompatibilities

See "10.Stability and Reactivity"

#### Advice on general occupational hygiene

Wash contaminated parts thoroughly after handling.

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

### Storage

#### Conditions for safe storage

Keep container tightly closed.

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

#### Container and packaging materials for safe handling

Glass

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## 8. Exposure controls/personal protection

### Control parameters

#### Adopted value

(Ethanol)

ACGIH(2008) STEL: 1000ppm (URT irr)

#### OSHA-PEL

(Ethanol)

TWA: 1000ppm, 1900mg/m<sup>3</sup>

### 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

##### Respiratory protection

Wear respiratory protection.

##### Hand protection

Wear protective gloves.

##### Eye protection

Wear eye/face protection.



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## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

Physical state: Liquid

Color: Dark blue

Odor: Characteristic odor

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: (reference)about 40°C

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

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

Vapor pressure data is not available.

Density and/or relative density: 0.96

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

No Particle characteristics data is not available.

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## 10. Stability and Reactivity

### Reactivity

Not available.

### Chemical stability

Stable under normal storage/handling conditions.

### Possibility of hazardous reactions

(Ethanol)

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

Reacts slowly with calcium hypochlorite, silver oxide and ammonia. This generates fire and explosion hazard. Reacts violently with strong oxidants such as nitric acid, silver nitrate, mercuric nitrate and magnesium perchlorate. This generates fire and explosion hazard. (ICSC 0044)

(Ammonium oxalate)

Decomposes on heating and on burning. This produces toxic and corrosive fumes including ammonia and nitrogen oxides. Reacts with oxidants. (ICSC 1036)

### Conditions to avoid

Contact with incompatible materials.

Contact with fire source.

### Incompatible materials

Oxidizing agents, Calcium hypochlorite, Silver oxide, Ammonia

### Hazardous decomposition products

Carbon oxides, Nitrogen oxides, Ammonia

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## 11. Toxicological Information

### Information on toxicological effects

#### Acute toxicity

Acute toxicity (Oral)

[GHS Cat. Japan, base data]



(C.I. Basic Violet 3)  
rat LD50=180mg/kg (JECFA FAS69, 2014)

**Irritant properties**

Skin corrosion/irritation  
[GHS Cat. Japan, base data]  
(Ammonium oxalate)  
human skin irritation (ICSC(J), 1995 et al)

Serious eye damage/irritation  
[GHS Cat. Japan, base data]  
(Ethanol)  
rabbit recover within 7 days (ECETOC TR No.48(2), 1998 et al)  
(C.I. Basic Violet 3)  
human eyes irritation (HSDB, Access on May 2019)  
(Ammonium oxalate)  
human eyes irritation (ICSC(J), 1995 et al)

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

**Carcinogenicity**

[GHS Cat. Japan, base data]  
(Ethanol)  
cat.1A; (IARC, 2010)  
(C.I. Basic Violet 3)  
cat.1B; (JECFA FAS69, 2014 et al.)  
(Ethanol)  
IARC-Gr.1 : Carcinogenic to humans  
(Ethanol)  
ACGIH-A3(2008) : Confirmed Animal Carcinogen with Unknown Relevance to Humans  
(C.I. Basic Violet 3)  
EU-Category 2; Substances suspected human carcinogens

**Reproductive toxicity**

[GHS Cat. Japan, base data]  
(Ethanol)  
cat. 1A; human : PATTY 6th, 2012

**STOT**

STOT-single exposure  
[cat.3 (resp. irrit.)]  
[GHS Cat. Japan, base data]  
(Ethanol)  
respiratory tract irritation (PATTY 6th, 2012)  
(Ammonium oxalate)  
respiratory tract irritation (SITTIG 4th, 2002)  
[cat.3 (drow./dizz.)]  
[GHS Cat. Japan, base data]  
(Ethanol)  
narcotic effect (PATTY 6th, 2012; SIDS, 2005)

**STOT-repeated exposure**

[cat.1]  
[GHS Cat. Japan, base data]  
(Ethanol)  
liver (DFGOT vol.12, 1999)  
[cat.2]  
[GHS Cat. Japan, base data]  
(Ethanol)  
CNS (HSDB, Access on Jun. 2013)



(C.I. Basic Violet 3)  
liver; female genitalia (JECFA FAS69, 2014 et al.)  
Aspiration hazard data is not available.

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## 12. Ecological Information

### Ecotoxicity

#### Aquatic toxicity

Hazardous to the aquatic environment (Acute)

[GHS Cat. Japan, base data]

(Ethanol)

Algae (Chlorella) EC50=1000mg/L/96hr (SIDS, 2005)

Hazardous to the aquatic environment (Long-term)

[GHS Cat. Japan, base data]

(Ethanol)

Crustacea (Ceriodaphnia reticulata) NOEC=9.6mg/L/10days (SIDS, 2005)

#### Water solubility

(Ammonium oxalate)

moderate (ICSC, 2012)

(Ethanol)

miscible (ICSC, 2000)

#### Persistence and degradability

(Ethanol)

Degrade rapidly (BOD\_Degradation : 89% (Registered chemicals data check & review, 1993))

#### Bioaccumulative potential

(Ethanol)

log Pow=-0.32 (ICSC, 2000)

#### Mobility in soil

Mobility in soil data is not available.

#### Other adverse effects

Ozone depleting chemical data is not available.

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## 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 in accordance with local/national regulation.

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## 14. Transport Information

UN No. or ID No.: 1170

UN Proper Shipping Name :

ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

Class or division (Transport hazard class) : 3

Packing group : III

ERG GUIDE No.: 127

Special provisions No.: 144; 223

#### IMDG Code (International Maritime Dangerous Goods Regulations)

UN No.: 1170

Proper Shipping Name :

ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

Class or division : 3

Packing group : III



Special provisions No.: 144; 223  
IATA Dangerous Goods Regulations  
UN No.: 1170  
Proper Shipping Name :  
ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)  
Class or division : 3  
Hazard labels : Flamm.liquid  
Packing group : III  
Special provisions No.: A3; A58; A180  
Environmental hazards  
MARPOL Annex III – Prevention of pollution by harmful substances  
Marine pollutants (yes/no) : no  
MARPOL Annex V – Prevention of pollution by garbage discharge  
Carcinogenicity: cat.1, 1A, 1B  
Ethanol; C.I. Basic Violet 3  
Reproductive toxicity: cat.1, 1A, 1B  
Ethanol  
Specific target organ toxicity – repeated exposure: cat.1  
Ethanol  
Maritime transport in bulk according to IMO instruments  
Noxious Liquid ; Cat. Z  
Ethanol  
Non Noxious Liquid ; Cat. OS  
Water

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#### 15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture  
Chemicals listed in TSCA Inventory  
Ethanol; C.I. Basic Violet 3; Ammonium oxalate; Water  
Other regulatory information  
Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

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#### 16. Other information

GHS classification and labelling  
Flam. Liq. 3: H226 Flammable liquid and vapor  
Eye Irrit. 2: H319 Causes serious eye irritation  
Carc. 1A: H350 May cause cancer  
Repr. 1A: H360 May damage fertility or the unborn child  
STOT RE 1: H372 Causes damage to organs through prolonged or repeated exposure  
Reference Book  
Globally Harmonized System of classification and labelling of chemicals, (7th revised edition, 2017), UN  
Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN  
IMDG Code, 2018 Edition (Incorporating Amendment 39-18)  
IATA Dangerous Goods Regulations (61th Edition) 2020  
Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012)  
2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)  
2020 TLVs and BEIs. (ACGIH)  
<http://monographs.iarc.fr/ENG/Classification/index.php>  
Supplier's data/information  
General Disclaimer





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 Japan official data (NITE published in 2019).