

SAFETY DATA SHEET

Fire - extinguishing agent

1. IDENTIFICATION

Product Name Fire - extinguishing agent
 Identified uses Fire - extinguishing agent.

Manufacturer MORITAMIYATA CORPORATION
 1-1-1-CHOME,SHIMOMACHIYA,CHIGASAKISHI,
 KANAGAWAKEN,JAPAN

Emergency Telephone +81-0467-85-1210 (Customer service)
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 Office hours (Japanese time)

2. HAZARD(S) IDENTIFICATION

Appearance Liquid
 Color Clear Yellow.
 Odor Characteristic.
 GHS Pictogram
 No pictogram required.

Hazard Statements
 H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements
 P273 Avoid release to the environment.
 P501 Dispose of contents/container in accordance with local regulations.

GHS Classification
 Physical and Chemical Hazards Not classified.
 Human health Not classified.
 Environment Aquatic Acute 3 - H402; Aquatic Chronic 3 - H412

Hazard Not Otherwise Classified (HNOC)
 Not applicable.

OSHA Regulatory Status
 This Product is Not Hazardous under the OSHA Hazard Communication Standard.

General Information
 Prolonged or repeated exposure may cause: Skin irritation. Splashes in the eyes may cause redness and irritation. The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CORROSION INHIBITOR

<1%

CAS No.: Proprietary

EC No.: Proprietary

GHS Classification

Ox. Sol. 3 - H272; Acute Tox. 3 - H301; Eye Irrit. 2 - H319; STOT SE 2 - H371; STOT RE 2 - H373; Aquatic Acute 1 - H400; Aquatic Chronic 1 - H410

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ETHANOL	<0.5%
CAS No.: 64-17-5	EC No.: 200-578-6
GHS Classification Flam. Liq. 2 - H225	
ETHYLENE GLYCOL	<0.5%
CAS No.: 107-21-1	EC No.: 203-473-3
GHS Classification Acute Tox. 4 - H302	
Other ingredients determined not to be hazardous, including water	Balance
CAS No.:	EC No.:
GHS Classification Not classified.	

4. FIRST-AID MEASURES

Description of first aid measures**Inhalation**

Move the exposed person to fresh air at once. Provide rest, warmth and fresh air. Rinse mouth thoroughly. Get medical attention if any discomfort continues.

Ingestion

Immediately rinse mouth and provide fresh air. Never give liquid to an unconscious person. Induce vomiting, if person is conscious. Get medical attention immediately!

Skin Contact

Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

Eye Contact

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

Most important symptoms and effects, both acute and delayed**Skin Contact**

Prolonged skin contact may cause redness and irritation.

Eye Contact

Splashes in the eyes may cause redness and irritation.

Indication of any immediate medical attention and special treatment needed**Notes To The Physician**

Wear necessary protective equipment.

5. FIRE-FIGHTING MEASURES

Auto Ignition Temperature (°C)

Not applicable.

Flammability Limit - Lower(%)

Not applicable.

Flammability Limit - Upper(%)

Not applicable.

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Flash point (°C)

Not applicable.

Extinguishing Media

The product is non-combustible.

Hazardous combustion products

In case of fire, toxic gases (CO, CO₂, NO_x) may be formed.

Special Fire Fighting Procedures

Containers close to fire should be removed or cooled with water. Warn everybody of potential hazards and evacuate if necessary.

Protective Equipment For Fire-Fighters

Use protective equipment appropriate for surrounding materials.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Wear protective clothing as described in Section 8 of this material safety data sheet. Warn everybody of potential hazards and evacuate if necessary. Provide adequate ventilation.

Environmental Precautions

Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

Spill Clean Up Methods

Absorb in vermiculite, dry sand or earth and place into containers.

Reference to other sections

For waste disposal, see section 13.

7. HANDLING AND STORAGE

Handling

Provide good ventilation. Wear protective clothing as described in Section 8 of this material safety data sheet. Handle and open container with care. Protect against physical damage and/or friction. Avoid spilling, skin and eye contact. Do not use contact lenses. Use anti-corrosion containers, tools, and piping. Do not eat, drink or smoke when using the product. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.

Storage

Keep away from food, drink and animal feeding stuffs. Store in tightly closed original container in a dry, cool and well-ventilated place.

Protect from freezing and direct sunlight.

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT	STD	TWA (8-hrs)		STEL (15 min)		Notes
ETHANOL	ACGIH			1000 ppm		A3
ETHANOL	PEL	1000 ppm	1900 mg/m ³			
ETHYLENE GLYCOL	PEL		100 mg/m ³			A4, C
COMPONENT						IDLH
ETHANOL						3300 ppm

ACGIH=American Conference of Governmental Industrial Hygienists.

A3: Confirmed Animal Carcinogen with Unknown Relevance to Humans.

A4: Not Classifiable as a Human Carcinogen.

Ceiling limit

Protective Equipment



Process Conditions

Provide eyewash, quick drench.

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Engineering Measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Respiratory Equipment

Wear suitable respiratory protection.

Hand Protection

Use protective gloves made of: Rubber or plastic.

Eye Protection

Wear goggles/face shield.

Other Protection

Wear conductive work clothes and work shoes.

Hygiene Measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid
Color	Clear Yellow.
Odor	Characteristic.
Solubility	Not available.
Initial boiling point and boiling range	
Not available.	
Melting point (°C)	
Not available.	
Relative density	1.005 (20 °C)
Vapor density (air=1)	
Not available.	
Vapor pressure	
Not available.	
Evaporation rate	
Not available.	
Evaporation Factor	
Not available.	
pH-Value, Conc. Solution	7.8 (20 °C)
Viscosity	
Not available.	
Solubility Value (G/100G H ₂ O@20°C)	
Not available.	
Decomposition temperature (°C)	
Not available.	
Odour Threshold, Lower	
Not available.	
Odour Threshold, Upper	
Not available.	
Flash point	
Not applicable.	
Auto Ignition Temperature (°C)	
Not applicable.	
Flammability Limit - Lower(%)	
Not applicable.	
Flammability Limit - Upper(%)	
Not applicable.	
Partition Coefficient (N-Octanol/Water)	
Not available.	
Explosive properties	
Not applicable.	

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Other Flammability

Not available.

Oxidising properties

Not available.

10. STABILITY AND REACTIVITY

Reactivity

There are no known reactivity hazards associated with this product.

Stability

Stable under normal temperature conditions and recommended use.

Hazardous reactions:

Not known.

Conditions To Avoid

Avoid frost.

Materials To Avoid

No incompatible groups noted.

Hazardous Decomposition Products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:**Acute Toxicity (Oral LD50)**

Not available.

Acute Toxicity (Dermal LD50)

Not available.

Acute Toxicity (Inhalation LC50)

Not available.

Skin Corrosion/Irritation:

Prolonged or repeated exposure may cause: Skin irritation.

Serious eye damage/irritation:

Splashes in the eyes may cause redness and irritation.

Respiratory or skin sensitisation:**Respiratory sensitisation**

Not available.

Skin sensitisation

Not available.

Germ cell mutagenicity:**Genotoxicity - In Vitro**

Not available.

Genotoxicity - In Vivo

Not available.

Carcinogenicity:**Carcinogenicity**

Not available.

IARC Carcinogenicity

Ethanol in alcoholic beverages : IARC Group 1 Carcinogenic to humans.

NTP - Carcinogenicity

Not listed.

OSHA - Carcinogenicity

Not listed.

Reproductive Toxicity:

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Reproductive Toxicity - Fertility

Not available.

Reproductive Toxicity - Development

Not available.

Specific target organ toxicity - single exposure:

STOT - Single exposure

Not available.

Specific target organ toxicity - repeated exposure:

STOT - Repeated exposure

Not available.

Aspiration hazard:

Viscosity

Not available.

12. ECOLOGICAL INFORMATION**Ecotoxicity**

The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

Acute Toxicity - Fish

Not available.

Acute Toxicity - Aquatic Invertebrates

Not available.

Acute Toxicity - Aquatic Plants

Not available.

Degradability

No data available.

Bioaccumulative potential

No data available on bioaccumulation.

Partition coefficient

Not available.

Mobility:

No information available.

Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB Substances.

Other adverse effects

Not known.

13. DISPOSAL CONSIDERATIONS**Disposal Methods**

Dispose of waste and residues in accordance with local authority requirements.

14. TRANSPORT INFORMATION

General	Not regulated.
UN No. (DOT/TDG)	N/A
UN No. (IMDG)	N/A
UN No. (ICAO)	N/A
DOT Proper Shipping Name	Not applicable.
DOT Hazard Class	No classification noted.
DOT Hazard Label	No DOT label requirement noted
IMDG Class	Not applicable.

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ICAO Class	Not applicable.
Transport Labels	No transport warning sign required.
DOT Pack Group	Not applicable.
IMDG Pack Group	Not applicable.
Air Pack Group	Not applicable.
Environmentally Hazardous Substance/Marine Pollutant No.	
Special precautions for user	Protect against physical damage and/or friction.
Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code Notes	
	Not applicable.

15. REGULATORY INFORMATION

Regulatory Status (US)

This Product is Not Hazardous under the OSHA Hazard Communication Standard.

Regulatory References

29 CFR 1910. 1200(g) Federal Regulations (OSHA Standard).

US Federal Regulations**SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities**

None of the ingredients are listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

The following ingredients are listed.

CORROSION INHIBITOR; 100 lbs (45.4 Kg)

ETHYLENE GLYCOL; 5, 000 lbs (2270 Kg)

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed.

SARA 313 Emission Reporting

The following ingredients are listed.

CORROSION INHIBITOR 1.0%

ETHYLENE GLYCOL 1.0%

CAA Accidental Release Prevention

None of the ingredients are listed.

SARA (311/312) Hazard Categories

None.

OSHA Highly Hazardous Chemicals

None of the ingredients are listed.

US State Regulations**California Proposition 65 Carcinogens and Reproductive Toxins**

None of the ingredients are listed.

California Air Toxics "Hot Spots" (A-I)

The following ingredients are listed.

ETHYLENE GLYCOL

California Air Toxics "Hot Spots" (A-II)

None of the ingredients are listed.

Massachusetts "Right To Know" List

The following ingredients are listed.

CORROSION INHIBITOR

ETHANOL

ETHYLENE GLYCOL

Rhode Island "Right To Know" List

The following ingredients are listed.

ETHANOL

ETHYLENE GLYCOL

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Minnesota "Right To Know" List

The following ingredients are listed.

ETHANOL

ETHYLENE GLYCOL

New Jersey "Right To Know" List

The following ingredients are listed.

CORROSION INHIBITOR

ETHANOL

ETHYLENE GLYCOL

Pennsylvania "Right To Know" List

The following ingredients are listed.

CORROSION INHIBITOR

ETHANOL

ETHYLENE GLYCOL

International Inventories

EU - EINECS/ELINCS

All ingredients are listed or exempt.

Canada – DSL/NDSL

All ingredients are listed or exempt.

US - TSCA

All ingredients are listed or exempt.

US – TSCA 12(b) Export Notification

None of the ingredients are listed.

16. OTHER INFORMATION

Revision Comments

This is first issue.

Date

12/22/2014

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.