

SAFETY DATA SHEET

1. Product and company identification

Name of chemical (Product name): FARMIN DM2285

Product No.: B0002115

Manufacturer/Importer/Distributor Information

Information on domestic manufacturer

Company Name: Kao Corporation
 Address: 1-3,Bunka 2-chome,Sumida-ku,Tokyo 131-8501 Japan
 Telephone: +81-3-5630-7700
 Fax: +81-3-5630-7889
 Division: Chemical Business
 E-mail: chemical@kao.co.jp

Emergency telephone number: 81-3-5630-7700

2. Hazard(s) identification

GHS classification:

Physical Hazards

Corrosive to metal Category 1

Health Hazards

Acute toxicity (Oral) Category 4
 Skin Corrosion/Irritation Category 1B
 Serious Eye Damage/Eye Irritation Category 1

Environmental Hazards

Acute hazards to the aquatic environment Category 1
 Chronic hazards to the aquatic environment Category 1

GHS label elements

Pictograms:



Signal Word: Danger

Hazard Statement: May be corrosive to metals.
 Harmful if swallowed.
 Causes severe skin burns and eye damage.
 Very toxic to aquatic life with long lasting effects.

Prevention: Keep only in original packaging. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Immediately wash material off the skin thoroughly with 2% acetic acid and plenty of water until slimy feeling disappears. Immediately call a POISON CENTER/doctor. Absorb spillage to prevent material damage. Collect spillage.

Storage: Store in a corrosion-resistant container with a resistant inner liner. Store locked up.

Disposal: Passed to a licensed waste contractor.

Unknown toxicity - Health

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| Acute toxicity, dermal | 100 % |
| Acute toxicity, inhalation, dust or mist | 100 % |

Unknown toxicity - Environment

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| Acute hazards to the aquatic environment | 0 % |
| Chronic hazards to the aquatic environment | 0 % |

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| 3. Composition/information on ingredients |
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Substances

| Chemical name or generic name | CAS number | ISHL | ENCS | Content in percent (%) |
|-------------------------------|------------|---------|---------|------------------------|
| Alkyl(C16-22) dimethylamines | 75444-69-8 | (2)-176 | (2)-176 | |

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| 4. First-aid measures |
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Description of necessary first-aid measures

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| Inhalation: | Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. |
| Skin Contact: | Call a POISON CENTER/doctor if you feel unwell. Remove/take off immediately all contaminated clothing. Immediately wash material off the skin thoroughly with 2% acetic acid and plenty of water until slimy feeling disappears. Wash contaminated clothing before reuse. |
| Eye contact: | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. |
| Ingestion: | Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. |

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Powder, alcohol-resistant foam, carbon dioxide, sand

Unsuitable extinguishing media: No data available.

Specific hazards arising from the chemical: Produce irritating or toxic gases in a fire.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: Keep away from sources of ignition and use appropriate extinguishing media. Fight fire from upwind position if possible. Do not flow the materials causing adverse effects into the environment with effluent fire extinguishing agents.

Special protective equipment for fire-fighters: Use goggles in combination with dust mask, and other protections as appropriate to situation. Risk of producing harmful gases such as carbon monoxide and nitrogen oxides. Avoid inhalation of smoke or gases.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Use goggles and protective gloves. Large spills : Remove person to safety. Ensure adequate ventilation.

Methods and material for containment and cleaning up: Sweep or vacuum spills to drums or containers.

Environmental Precautions: Avoid release to the environment.

Prevention of secondary hazards: Keep away from sources of ignition and prepare extinguishing media.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation): Iron is apt to rust. Plant equipment should be treated with rust-resist. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Safe handling advice: Keep away from source of ignition. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using the product. Use an adequate ventilation. Wash thoroughly after handling. Use personal protective equipment as required. Avoid contact with acids.

Contact avoidance measures: No data available.

Hygiene measures: No data available.

Storage

Safe storage conditions: Store locked up. Keep away from source of ignition. Store in a corrosion-resistant container with a resistant inner liner. Keep container tightly closed. Store in a well-ventilated place. Keep under nitrogen. Do not store with acids.

Safe packaging materials: No data available.

Storage Temperature: No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

None known.

Individual protection measures, such as personal protective equipment

Eye/face protection: Safety goggles or Face shield

Hand Protection: Material: Gloves (alkali-resistant)

Skin and Body Protection: Alkali-resistant protective clothing

Respiratory Protection: Use chemical cartridge respirator for alkalines, as appropriate to situation.

9. Physical and chemical properties

Appearance

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| Physical state: | solid |
| Form: | Solid |
| Color: | White |
| Odor: | Amine-like odor |
| Odor Threshold: | No data available. |
| pH: | No data available. |
| Melting Point: | 111 °F/44 °C |
| Boiling Point: | No data available. |
| Flash Point: | 410 °F/210 °C (Cleveland open cup) |
| Evaporation Rate: | No data available. |
| Flammability: | No data available. |
| Explosive limit - upper: | No data available. |
| Explosive limit - lower: | No data available. |
| Vapor pressure: | 100 Pa (374 °F/190 °C) |
| Vapor density (air=1): | No data available. |
| Density: | 0.788 g/ml (140 °F/60 °C) |
| Relative density: | No data available. |
| Solubility in Water: | Insoluble in water |
| Solubility (other): | Soluble in various organic solvents |
| Partition coefficient (n-octanol/water): | No data available. |
| Self Ignition Temperature: | No data available. |
| Decomposition Temperature: | No data available. |
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| Kinematic viscosity: | No data available. |
| Dynamic viscosity: | No data available. |
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| Particle properties: | No data available. |
| Metal Corrosion: | Corrosive to metal |

10. Stability and reactivity

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| Reactivity: | No data available. |
| Chemical Stability: | No data available. |
| Possibility of hazardous reactions: | Reacts with acids. Has no self-reactivity. |
| Conditions to avoid: | No data available. |
| Incompatible Materials: | No data available. |

Hazardous Decomposition Products: No data available.

11. Toxicological information

Acute toxicity (list all possible routes of exposure)

Oral Product: ATEmix: 500 mg/kg

Dermal Product: Classification not possible due to insufficient data.

Inhalation Product: Dusts, mists and fumes: Classification not possible due to insufficient data.
 Vapour: No data available.
 Not classified based on available data of component(s).

Skin Corrosion/Irritation Product: No data available.

Components:
 Alkyl(C16-22) dimethylamines Category 1B (88)

Serious Eye Damage/Eye Irritation Product: No data available.

Components:
 Alkyl(C16-22) dimethylamines Category 1 (88)

Respiratory or Skin Sensitization Product: Skin: Classification not possible due to insufficient data.
 Respiratory: Classification not possible due to insufficient data.

Carcinogenicity Product: Classification not possible due to insufficient data.

IARC: No carcinogenic components identified

ACGIH: No carcinogenic components identified

NTP: No carcinogenic components identified

JSOH: No carcinogenic components identified

EU

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro
Product: Classification not possible due to insufficient data.

In vivo
Product: Classification not possible due to insufficient data.

Reproductive toxicity
Product: Classification not possible due to insufficient data.

Specific Target Organ Toxicity - Single Exposure
Product: Classification not possible due to insufficient data.

Specific Target Organ Toxicity - Repeated Exposure
Product: Classification not possible due to insufficient data.

Aspiration Hazard
Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment

Fish
Product: No data available.

Aquatic Invertebrates
Product: No data available.

Toxicity to Aquatic Plants
Product: No data available.

Components:
 Alkyl(C16-22)
 dimethylamines Category 1: (88)

Chronic hazards to the aquatic environment

Fish
Product: No data available.

Aquatic Invertebrates
Product: No data available.

Toxicity to Aquatic Plants
Product: No data available.

Components:

Alkyl(C16-22) dimethylamines Category 1: (88)

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in soil:

No data available.

Hazardous to the ozone layer:

Not Regulated
 No data available.
 Not classified based on available data of component(s).

Further Information:

No data available.

13. Disposal considerations

Disposal methods:

Review "HANDLING AND STORAGE (Section 7)". Passed to a licensed waste contractor. Incinerate with little portions. Risk of producing harmful gases such as carbon monoxide and nitrogen oxides.

Contaminated Packaging:

No data available.

14. Transport information

International regulations

IMDG

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| UN Number: | UN 3259 |
| UN Proper Shipping Name: | AMINES, SOLID, CORROSIVE, N.O.S. (Dimethyl Alkylamine) |
| Transport Hazard Class(es) | |
| Class: | 8 |
| Label(s): | 8 |
| EmS No.: | F-A, S-B |
| Packing Group: | II |
| Limited quantity | 1.00KG |
| Excepted quantity | E2 |
| Environmentally Hazardous: | Yes |
| Marine Pollutant: | Yes |
| Special precautions for user: | Not regulated. |

IATA

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| UN Number: | UN 3259 |
| UN Proper Shipping Name: | Amines, solid, corrosive, n.o.s. (Dimethyl Alkylamine) |
| Transport Hazard Class(es): | |
| Class: | 8 |
| Label(s): | 8 |
| Packing Group: | II |
| Excepted quantity | E2 |
| Environmentally Hazardous: | Yes |
| Marine Pollutant: | No |
| Special precautions for user: | Not regulated. |
| Other information | |
| Passenger and cargo aircraft: | Allowed. 859 |
| Cargo aircraft only: | Allowed. 863 |
| UN Proper Shipping Name (JP): | AMINES, SOLID, CORROSIVE, N. O. S. (Dimethyl Alkylamine) |

National Regulations

Domestic Standard: In compliance with domestic law.

Emergency Response Guide Number153

15. Regulatory information

Industrial Safety and Health Law
 Not Regulated

Poisonous and Deleterious Substances Control Act
 Not Regulated

Explosives Control Act:
 Not Regulated

High Pressure Gas Safety Act:
 Not Regulated

Fire Service Act:
 -: Designated Flammable Substances, Flammable solid, Designated Quantity (3000 kilogram)

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.
 Not Regulated

Law concerning Pollutant Release and Transfer Register
 Not Regulated

Ship Safety Law, Dangerous Goods Marine Transport and Storage Rule:
 Corrosive substances

Air Law, Enforcement Rule:
 Corrosive substances

Act on Prevention of Marine Pollution and Maritime Disaster:
 Pack transport, Marine pollutant
 Category: X

Export Trade Control Order
 Not Regulated

Inventory Status:

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| US TSCA Inventory: | On or in compliance with the inventory |
| Canada DSL Inventory List: | On or in compliance with the inventory |
| Australia AICS: | Not in compliance with the inventory |
| Korea Existing Chemicals Inv. (KECI): | Contact us for information |
| Japan (ENCS) List: | On or in compliance with the inventory |
| Japan ISHL Listing: | On or in compliance with the inventory |
| Philippines PICCS: | Not in compliance with the inventory |
| China Inv. Existing Chemical Substances: | Not in compliance with the inventory |
| REACH (EU): | Contact us for information |
| Taiwan Chemical Substance Inventory: | On or in compliance with the inventory |

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| 16.Other Information |
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Disclaimer:

To the best of the manufacturer's knowledge, the information contained herein is accurate. However, neither the manufacturer, nor any of its affiliates, make any representations or warranties (expressed or implied), nor assumes any liability (including liability for any direct, incidental, consequential, or other damages) with respect to the accuracy or completeness of the information contained herein. Such information may be (without limitation) invalid if the specified material is used in combination with another, in a particular process, or under unusual conditions. Determination of suitability of any material for any given purpose is the sole responsibility of the user who assumes all risk and responsibility therefore. All materials may present unknown hazards and should be used with appropriate caution. The manufacturer cannot and does not guarantee that the hazards described herein are the only ones that exist. In the case of the product for fragrance, it's in accordance with the latest standard of IFRA within ordinary use. Contact with the supplier for detail information.

Reference:

- Hazard communication of chemicals based on GHS -- Labelling and Safety Data Sheet (SDS) (JIS Z 7253 : 2019)
- International Chemical Safety Cards (ICSC) (Compiler's Guide) (1994)
- GHS guideline -- Labelling and Safety Data Sheet (2019) Japan Chemical Industry Association (88): ECHA-REACH Registered Substances Database