

SAFETY DATA SHEET

1. Product and company identification

Name of chemical (Product name): DIAMIN R-86

Product No.: B0001754

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:

Health Hazards

Skin Corrosion/Irritation	Category 2
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

Product name:
 DIAMIN R-86

- Hazard Statement:** Causes skin irritation.
 Causes serious eye damage.
 Very toxic to aquatic life with long lasting effects.
- Prevention:** Avoid release to the environment. Wash thoroughly after handling. Wear protective gloves/eye protection/face protection. This product may be solidified totally or partially according to the storage condition. In that case, please warm-up for melting, then use at homogeneous liquid.
- Response:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. 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. Collect spillage.
- Storage:** -
- Disposal:** Passed to a licensed waste contractor.

Unknown toxicity - Health

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

Unknown toxicity - Environment

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

3. Composition/information on ingredients

Substances

Chemical name or generic name	CAS number	ISHL	ENCS	Content in percent (%)
Amines, N-(hydrogenated tallow alkyl)trimethylenediamines	68603-64-5	(7)-5	(7)-5	

4. First-aid measures

Description of necessary first-aid measures

Inhalation: Remove person to fresh air and keep comfortable for breathing.

Skin Contact:	If skin irritation occurs, get medical advice/attention. Take off contaminated clothing and wash before re-use. 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.
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:	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):

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use an adequate ventilation.

Safe handling advice:

Keep away from source of ignition. Avoid contact with eyes. This product may be solidified totally or partially according to the storage condition. In that case, please warm-up for melting, then use at homogeneous liquid. 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:

Keep container tightly closed. Store in a well-ventilated place. Keep away from source of ignition. 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

Product:

None known.

Individual protection measures, such as personal protective equipment

Eye/face protection:

Safety goggles

Hand Protection:

Material: Rubber gloves

Skin and Body Protection:

Full-body suit

Respiratory Protection:

Use as appropriate to situation.

Product name:
DIAMIN R-86

Hygiene measures: No data available.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state: Solid
Form: Solid or Flake
Color: Pale yellow

Odor: Amine-like odor
Odor Threshold: No data available.

Melting Point: 118 °F/48 °C
Boiling Point: No data available.

Flammability: No data available.

Upper/lower limit on flammability or explosive limits

Explosive limit - upper: No data available.
Explosive limit - lower: No data available.

Flash Point: 399 °F/204 °C (Cleveland open cup)

Self Ignition Temperature: No data available.

Decomposition Temperature: No data available.

pH: No data available.

Viscosity

Dynamic viscosity: No data available.
Kinematic viscosity: No data available.
Flow Time: No data available.

Solubility(ies)

Solubility in Water: Insoluble in water
Solubility (other): Soluble in various organic solvents

Partition coefficient (n-octanol/water): No data available.

Vapor pressure: No data available.

Relative density: No data available.

Density: 0.822 g/ml (122 °F/50 °C)
0.816 g/ml (140 °F/60 °C)
0.81 g/ml (158 °F/70 °C)

Relative vapor density: No data available.

Particle characteristics

Particle Size: No data available.
Particle Size Distribution: No data available.

Heat of combustion ≥ 34 kJ/g

10. Stability and reactivity

Reactivity: No data available.

Product name:
 DIAMIN R-86

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

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:

Amines, N-(hydrogenated
 tallow
 alkyl)trimethylenediamines

Category 2 (42)

Serious Eye Damage/Eye Irritation

Product: No data available.

Components:

Amines, N-(hydrogenated
 tallow
 alkyl)trimethylenediamines

Category 1 (42)

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.

Product name:
DIAMIN R-86

IARC:
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.

Product name:
 DIAMIN R-86

Components:

Amines, N-(hydrogenated
 tallow
 alkyl)trimethylenediamines
 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:

Amines, N-(hydrogenated
 tallow
 alkyl)trimethylenediamines
 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: No data available.

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.

Product name:
DIAMIN R-86

14. Transport information

International regulations

IMDG

UN Number:	UN 3077
UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Amines, N-(hydrogenated tallow alkyl)trimethylenediamines)
Transport Hazard Class(es)	
Class:	9
Label(s):	9
EmS No.:	F-A, S-F
Packing Group:	III
Limited quantity	5.00KG
Excepted quantity	E1
Environmentally Hazardous:	Yes
Marine Pollutant:	Yes
Special precautions for user:	Not regulated.

IATA

UN Number:	UN 3077
UN Proper Shipping Name:	Environmentally hazardous substance, solid, n.o.s. (Amines, N-(hydrogenated tallow alkyl)trimethylenediamines)
Transport Hazard Class(es):	
Class:	9
Label(s):	9MI (Miscellaneous)
Packing Group:	III
Excepted quantity	E1
Environmentally Hazardous:	Yes
Marine Pollutant:	No
Special precautions for user:	Not regulated.
Other information	
Passenger and cargo aircraft:	Allowed. 956
Cargo aircraft only:	Allowed. 956
UN Proper Shipping Name (JP):	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N. O. S. (Amines, N-(hydrogenated tallow alkyl)trimethylenediamines)

National Regulations

Domestic Standard: In compliance with domestic law.

Emergency Response Guide Number 171

15. Regulatory information

Law concerning Pollutant Release and Transfer Register
Not Regulated

Industrial Safety and Health Law
Not Regulated
SDS JP-B0001754-A

Product name:
 DIAMIN R-86

Poisonous and Deleterious Substances Control Act
 Not Regulated

Explosives Control Act:
 Not Regulated

High Pressure Gas Safety Act:
 Not Regulated

Fire Service Act:
 Designated combustible materials: Combustible solids (3,000 kg)

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

Ship Safety Law, Dangerous Goods Marine Transport and Storage Rule:
 Miscellaneous dangerous substances and articles

Air Law, Enforcement Rule:
 Miscellaneous dangerous substances and articles

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

Export Trade Control Order:
 Not Regulated

Inventory Status:

US TSCA Inventory:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
Australia AICS:	On or 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:	On or in compliance with the inventory
REACH (EU):	Contact us for information
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory

16. Other Information

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
- (42): Classification and Labelling of Surfactants (CESIO)
- (88): ECHA-REACH Registered Substances Database