

## SAFETY DATA SHEET

## [1.PRODUCT AND COMPANY IDENTIFICATION]

PRODUCT NAME : DIAMIN RRT  
 SUPPLIER : Kao Corporation  
 ADDRESS : 1-3,Bunka 2-chome,Sumida-ku,Tokyo 131-8501 Japan  
 DIVISION : Global Chemical Business  
 TELEPHONE NUMBER : 81-3-5630-7700  
 FAX NUMBER : 81-3-5630-7889  
 E-MAIL ADDRESS : chemical@kao.co.jp  
 EMERGENCY TELEPHONE NUMBER : 81-3-5630-7700  
 RECOMMENDED USE :  
 AND RESTRICTIONS ON USE :

## [2.HAZARDS IDENTIFICATION]

## GHS CLASSIFICATION

## PHYSICAL AND CHEMICAL HAZARDS

CORROSIVE TO METALS : Category 1

## HEALTH HAZARDS

ACUTE TOXICITY (Oral) : Category 4  
 ACUTE TOXICITY (Dermal) : Classification not possible  
 ACUTE TOXICITY (Inhalation) : Not applicable(Vapours)  
 SKIN CORROSION / IRRITATION : Category 1B  
 SERIOUS EYE DAMAGE / EYE IRRITATION : Category 1  
 RESPIRATORY SENSITIZATION : Classification not possible  
 SKIN SENSITIZATION : Classification not possible  
 GERM CELL MUTAGENICITY : Classification not possible  
 CARCINOGENICITY : Classification not possible  
 REPRODUCTIVE TOXICITY : Classification not possible  
 SPECIFIC TARGET ORGAN TOXICITY  
 - SINGLE EXPOSURE : Classification not possible  
 - REPEATED EXPOSURE : Category 1  
 ASPIRATION HAZARD : Classification not possible

## ENVIRONMENTAL HAZARDS

## HAZARDOUS TO THE AQUATIC ENVIRONMENT

- ACUTE HAZARD : Category 1  
 - LONG-TERM HAZARD : Category 1  
 - HAZARDOUS TO THE OZONE LAYER : Classification not possible

## GHS LABEL ELEMENTS

## PICTOGRAMS OR SYMBOLS :



## SIGNAL WORD :

Danger

## HAZARD STATEMENTS :

May be corrosive to metals  
 Harmful if swallowed  
 Causes severe skin burns and eye damage  
 Causes damage to organs through prolonged or repeated exposure  
 Very toxic to aquatic life with long lasting effects

## PRECAUTIONARY STATEMENTS

PREVENTION	: Keep only in original container. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid release to the environment. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
RESPONSE	: IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. 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 or doctor. Absorb spillage to prevent material damage. Collect spillage.
STORAGE	: Store in corrosive resistant/container with a resistant inner liner. Store locked up.
DISPOSAL	: Passed to a licensed waste contractor.
SAFE HANDLING ADVICE	: Refer to SDS. 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.

## [3.COMPOSITION / INFORMATION ON INGREDIENTS]

SUBSTANCE OR MIXTURE	: Substance
INGREDIENTS AND CONCENTRATION RANGE	: N-Tallow alkyltrimethylenediamines
CAS RN	: 61791-55-7

## [4.FIRST-AID MEASURES]

IN CASE OF INHALATION	: Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor.
IN CASE OF SKIN CONTACT	: 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. Immediately call a POISON CENTER or doctor.
IN CASE OF 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 or doctor.
IN CASE OF INGESTION	: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.

## [5.FIRE-FIGHTING MEASURES]

EXTINGUISHING MEDIA	: Powder, alcohol-resistant foam, carbon dioxide, sand
NOT SUITABLE EXTINGUISHING MEDIA	: No information available
SPECIFIC HAZARDS	: Produce irritating or toxic gases in a fire.
SPECIFIC METHODS	: 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.

- PROTECTION OF 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 PROCEDURE : Use goggles and protective gloves.  
Large spills : Remove person to safety.  
Ensure adequate ventilation.
- ENVIRONMENTAL PRECAUTIONS : Avoid release to the environment.
- METHODS FOR CLEANING UP : Cool down to solid in case of melt (be careful of heat), and then sweep or vacuum spilled materials to drums or containers.
- PREVENTION OF SECONDARY HAZARDS : Keep away from sources of ignition and prepare extinguishing media.

## [7.HANDLING AND STORAGE]

## HANDLING

- TECHNICAL MEASURES : Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
- PRECAUTIONS : Keep away from source of ignition.  
Avoid contact with eyes and skin.  
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.
- SAFE HANDLING ADVICE : Use an adequate ventilation.  
Wash thoroughly after handling.  
Use personal protective equipment as required.  
Do not breathe dust/fume/gas/mist/vapours/spray.  
Do not eat, drink or smoke when using this product.  
Avoid contact with acids.

## STORAGE

- SUITABLE STORAGE CONDITIONS : Store container tightly closed in well-ventilated place.  
Store in corrosive resistant/container with a resistant inliner.  
Store locked up.  
Keep away from source of ignition.  
Keep under nitrogen.  
Do not store with acids.
- SAFE PACKAGING MATERIALS : No information available

## [8.EXPOSURE CONTROLS / PERSONAL PROTECTION]

- ENGINEERING MEASURES : Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.  
Use an adequate ventilation.  
Iron is apt to rust. Plant equipment should be treated with rust-resist.
- LIMIT VALUES
- ACGIH (TLV) : Not established
- OSHA (PEL) : Not established
- PERSONAL PROTECTIVE EQUIPMENT
- RESPIRATORY PROTECTION : Use chemical cartridge respirator for alkalines, as appropriate to situation.
- HAND PROTECTION : Gloves (alkali-resistant)
- EYE PROTECTION : Safety goggles or Face shield
- SKIN AND BODY PROTECTION : Alkali-resistant protective clothing
- HYGIENE MEASURES : No information available

## [9. PHYSICAL AND CHEMICAL PROPERTIES]

## APPEARANCE

PHYSICAL STATE	: Solid
COLOUR	: Yellow-brown
ODOUR	: Amine-like odour
pH	: Not applicable

SPECIFIC TEMPERATURES / TEMPERATURE RANGES  
AT WHICH CHANGES IN PHYSICAL STATE OCCUR

BOILING POINT	: No information available
MELTING POINT	: 35 °C ( 95 °F)
FLASH POINT	: 213 °C ( 415.4 °F) (CLEVELAND open cup method)

## FLAMMABILITY OR EXPLOSIVE PROPERTIES

FLAMMABILITY OR EXPLOSIVE LIMITS	: UPPER LIMIT : No information available LOWER LIMIT : No information available
VAPOUR PRESSURE	: No information available
VAPOUR DENSITY	: No information available
DENSITY (SPECIFIC GRAVITY)	: 0.836 g/mL ( 40 °C) ( 104 °F) 0.83 g/mL ( 50 °C) ( 122 °F) 0.824 g/mL ( 60 °C) ( 140 °F)

## SOLUBILITY

WATER SOLUBILITY	: Insoluble
SOLVENT SOLUBILITY	: Soluble in various organic solvents.
PARTITION COEFFICIENT: n-OCTANOL / WATER (log Pow)	: No information available
AUTO-IGNITION TEMPERATURE	: No information available
DECOMPOSITION TEMPERATURE	: No information available
ODOUR THRESHOLD	: No information available
EVAPORATION RATE	: No information available
FLAMMABILITY (SOLID,GAS)	: No information available
VISCOSITY	: No information available
OTHER DATA	: No information available

## [10. STABILITY AND REACTIVITY]

CHEMICAL STABILITY	: No information available
POSSIBILITY OF HAZARDOUS REACTIONS	: Reacts with acids.  No self-reactivity.
CONDITIONS TO AVOID	: No information available
INCOMPATIBLE MATERIALS	: No information available
HAZARDOUS DECOMPOSITION PRODUCTS	: No information available
OTHERS	: No information available

## [11. TOXICOLOGICAL INFORMATION]

## ACUTE TOXICITY

Oral	
INFORMATION ON PRODUCT	: Mouse, LD50 : 1931 mg/kg (male)
Dermal	
INFORMATION ON PRODUCT	: No information available
Inhalation	

INFORMATION ON PRODUCT : No information available  
 SKIN CORROSION / IRRITATION  
 INFORMATION ON PRODUCT : No information available  
 SERIOUS EYE DAMAGE / IRRITATION  
 INFORMATION ON PRODUCT : No information available  
 RESPIRATORY OR SKIN SENSITIZATION  
 RESPIRATORY  
 INFORMATION ON PRODUCT : No information available  
 SKIN  
 INFORMATION ON PRODUCT : No information available  
 MUTAGENICITY (GERM CELL MUTAGENICITY)  
 INFORMATION ON PRODUCT : Ames test (TA98, TA100) : Negative  
 CARCINOGENICITY  
 INFORMATION ON PRODUCT : No information available  
 IARC : Not listed  
 NTP : Not listed  
 EU : Not listed  
 OSHA : Not listed  
 REPRODUCTIVE TOXICITY  
 INFORMATION ON PRODUCT : No information available  
 SPECIFIC TARGET ORGAN TOXICITY  
 - SINGLE EXPOSURE  
 INFORMATION ON PRODUCT : No information available  
 - REPEATED EXPOSURE  
 INFORMATION ON PRODUCT : No information available  
 ASPIRATION HAZARD  
 INFORMATION ON PRODUCT : No information available  
 OTHER INFORMATION : No information available

## [12.ECOLOGICAL INFORMATION]

ECOTOXICITY : No information available  
 PERSISTENCE / DEGRADABILITY : No information available  
 MOBILITY IN SOIL : No information available  
 BIOACCUMULATIVE POTENTIAL : No information available  
 OTHER ADVERSE EFFECTS : No information available

## [13.DISPOSAL CONSIDERATIONS]

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.

Dispose of waste in accordance with local, state and federal regulations.

## [14.TRANSPORT INFORMATION]

Follow all regulations in your country or region

## INTERNATIONAL REGULATIONS

UN CLASS / UN NUMBER	: Class 8 / UN3259	
IATA	: UN Number	UN3259
	Proper Shipping Name	Amines, Solid, Corrosive, n.o.s.(containing N-Tallow alkyltrimethylenediamines)

IMDG	Class	8
	Packing Group	II
	: UN Number	UN3259
	Proper Shipping Name	Amines, Solid, Corrosive, n.o.s.(containing N-Tallow alkyltrimethylenediamines)
SPECIAL PRECAUTIONS FOR USER	Class	8
	Packing Group	II
	Additional Information	Marine pollutant
	: Review "ACCIDENTAL RELEASE MEASURES (Section 6)".	
	Review "HANDLING AND STORAGE (Section 7)".	
	Ensure containers without breakage or leakage.	
	Ensure containers tightly fixed.	
	Follow all regulations in your country or region.	
	Keep away from source of ignition.	
	Emergency Response Guide(ERG) Numbers : 153	

## [15.REGULATORY INFORMATION]

Follow all regulations in your country or region.

INVENTORIES	: ENCS(Japan)	8-344
	TSCA(USA)	Yes
	EINECS(EU)	263-189-0
	AICS(Australia)	Yes
	DSL(Canada)	Yes
	ECL(Korea)	KE-32926
	PICCS(Philippines)	Yes
	IECSC(China)	Yes

KAO Corporation is not able to check up the regulatory information in regard to the substances in your country or region,therefore,we request this matter would be filled by your responsibility.

## [16.OTHER INFORMATION]

REFERENCE	: -Safety data sheet for chemical products - Part 1: Content and order of sections(ISO 11014-1)
	-International Chemical Safety Cards(ICSC) (Compiler's Guide)(1994)

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