

Safety Data Sheet

1. Product and company identification

Product name : Adamantane
Name of manufacturer : KANTO CHEMICAL CO., INC.
Address : 2-1, Nihonbashi, Muromachi 2-Chome, Chuo-Ku, Tokyo, 103-0022, Japan
Name of section : Reagent division, catalog and products information section
Telephone number : +81-3-6214-1090
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Mail address : BC32@gms.kanto.co.jp
SDS No. : 01632

2. Summary of danger and Hazard

GHS classification

Physical and chemical hazard

Flammable solids : Out of category

Pyrophoric solids : Out of category

Human health hazard

Acute toxicity(oral) : Out of category

Serious eye damage • Eye irritation

: Category 2B

Environmental hazard

Hazardous to the aquatic environment-acute hazard

: Category 1

Hazardous to the aquatic environment-chronic hazard

: Category 1

Pictogram or symbol



Signal word : Warning

Hazard statement : Causes eye irritation
Very toxic to aquatic life
Very toxic to aquatic life with long lasting effects

Cautions

Safety measurements : Avoid release to the environment.

First-aid measures : If in eyes : Rinse cautiously with water for several minutes. Get medical treatment.

Wash hands thoroughly after handling.

Collect leakage

Disposal : Dispose of contents and containers appropriately in accordance with related regulations.

3. Composition/Information on ingredients



Kanto Chemical Co., Inc.

Substance/Mixture : Substance
Chemical name or commercial name : Tricyclo[3.3.1.1³,7]decane
Ingredients and composition : Adamantane min. 98.0%
Chemical formula : C₁₀H₁₆
CAS No. : 281-23-2
TSCA Inventory : Registered
EINECS No. : 2060014

4. First aid measures

Inhalation : Remove the victim to fresh air, and make him blow his nose and gargle.
Skin contact : Wash the affected areas under running water.
Eye contact : Wash the affected areas under running water for at least 15 minutes.
If necessary, get medical treatment.
Ingestion : Give the victim water or salt water and induce vomiting. If necessary,
get medical attention.
Protection for first aid person : Savers wear proper protective equipment like rubber gloves, goggles.

5. Fire fighting measures

Extinguishing media : Water, dry chemical powder, carbon dioxide, dry sand, foam
Prohibited extinguishing media : None
Particular fire fighting : Move containers from fire area if it can be done without risk, if not
possible, apply water from a safe distance to cool and protect
surrounding area.
Protection for firefighters : Firefighters should wear protective equipment.

6. Accidental release measures

Cautions for personnel : Wear proper equipment and avoid contact with skin and inhalation of
dust. Keep away personnel except for authorized ones from spillage
area by stretching ropes.
Cautions for environment : Attention should be given not to cause damage to the environment by
flowing of spillage to rivers. In case of the dilution of copious
water, do not cause damage to the environment by untreated wastewater.
Removal measure : Sweep up in a chemical waste container. Flush residual area with
copious amounts of water.

7. Cautions of handling and storage

Handling
Engineering measures : If necessary, wear appropriate protective equipment not to contact
with skin or inhale the dust. Keep away from fire.
Storage
Adequate storage condition : Store in a dark, cool place and tightly closed.



Safety adequate container materials

: Glass, polyethylene, polypropylene

8. Exposure control/Personal protection

Engineering measures : Use only with adequate ventilation and in closed systems.

Control parameters

ACGIH(2009) : Not established

Protective equipment

Respiration protective equipment

: If necessary, wear a chemical cartridge respirator.

Hands protective equipment

: Impervious protective gloves

Eyes protective equipment

: Safety goggles

9. Physical and chemical properties

Appearance : Crystalline powder

Color : White-pale gray

Odor : camphor odor

Melting point : 205-210°C

Flash point : Not available

Auto-ignition point : 287°C

Vapor density : 4.7

Specific gravity : 1.07

Solubility

Solubility in solvents : Water ; Practically insoluble

Organic solvent; insoluble in benzene, chloroform, soluble in ethanol

10. Stability and reactivity

Stability : Fine powder of the chemical may cause dust explosion.

Reactivity : React with oxidizing substances.

Incompatible conditions : Light, heat

Incompatible materials : Oxidizing substances

Hazardous decomposition products

: Carbon monoxide

11. Toxicological information

Acute toxicity : Oral : Out of category

Dermal : Not possible to classify because of insufficient data.

Inhalation(vapor) : Not possible to classify because of insufficient data.

Inhalation(dust, mist) : Not possible to classify because of insufficient data.

rat oral LD50>10g/kg

mouse oral LD50>10g/kg



Skin corrosiveness : Not possible to classify because of insufficient data.

Irritation to skin, eyes : Causes eye irritation(category 2B)

As the substance causes mild irritation of rabbit eyes, the classification is set in category 2B.

Respiratory sensitization or Skin sensitization

: Respiratory sensitization : Not possible to classify because of insufficient data.

Skin sensitization : Not possible to classify because of insufficient data.

Mutagenicity : Not possible to classify because of insufficient data.

Carcinogenic effects : Not possible to classify because of insufficient data

Effects on the reproductive system

: Not possible to classify because of insufficient data.

Specific target organ systemic toxicity single exposure

: Not possible to classify because of insufficient data.

Specific target organ systemic toxicity repeated exposure

: Not possible to classify because of insufficient data.

Aspiration hazard : Not possible to classify because of insufficient data.

12. Ecological information

Ecotoxicity

Fish toxicity : Very toxic to aquatic life(category 1)

Very toxic to aquatic life with long lasting effects(category 1)

Pimephales promelas LC50=0.261-0.312mg/L/96H

Ecoremediability : Not available

13. Disposal consideration

Residual disposal : Mixed with flammable organic solvents and burn in a chemical incinerator equipped with an afterburner and a scrubber. Or entrust approved waste disposal companies with the disposal.

Containers : In case of disposal of empty bottles, dispose bottles after removing the content thoroughly.

14. Transport information

UN class : Class 9(Miscellaneous dangerous substances) P. G. III

UN number : 3077

Marine regulation information

UN No. : 3077

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N. O. S.

Class : 9

Sub risk : -

Packing group : III

Marine pollutant : P

Aviation regulation information

UN No. : 3077

Proper shipping name : Environmentally hazardous substance, solid, n. o. s.



Class : 9
Sub risk : -
Packing group : III

15. Regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information

References Encyclopaedia Chemica, Kyoritsu Shuppan Co., Ltd. (1963)

The information contained herein is based on several references and the present state of our knowledge. However the SDS does not always cover all information about the product, handle the product carefully. The information is intended to ordinary usage, in case of particular handlings, conduct appropriate safety measurements. The information herein is only provision of information, and it does not represent a guarantee the properties of the product. The Safety Data Sheet (SDS) is prepared based on JIS Z7253, and it has the same required elements on the Material Safety Data Sheet (MSDS) which is prepared based on JIS Z7250:2010.

