

## Safety Data Sheet

### 1. Product and company identification

Product name : 1,3-Diallylimidazolium tetrafluoroborate  
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  
Facsimile number : +81-3-3241-1047  
Mail address : BC32@gms.kanto.co.jp  
SDS No. : 11476

### 2. Summary of danger and Hazard

#### GHS classification

##### Physical and chemical hazard

Flammable liquids : Out of category

Pyrophoric liquids : Out of category

Self-heating substances and mixtures  
: Out of category

Substances and mixtures which, in contact with water, emit flammable gases  
: Out of category

Oxidizing liquids : Out of category

##### Human health hazard

##### Skin corrosion • Irritation

: Category 1A

##### Serious eye damage • Eye irritation

: Category 1

#### Pictogram or symbol



Signal word : Danger

Hazard statement : Causes severe skin burns and eye damage  
Causes serious eye damage

#### Cautions

Safety measurements : Do not breathe dust and mist.

Wear appropriate protective gloves, glasses, clothing, face shield, or mask.

Wash protective equipment thoroughly after use.

First-aid measures : If inhaled : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical treatment if you feel unwell.



If swallowed: Rinse mouth, do not induce vomiting. Immediately get medical treatment.

If in eyes : Rinse cautiously with water for several minutes. Get medical treatment.

If on skin : Remove contaminated clothing and the substance. Immediately get medical treatment.

Storage : Store locked up.

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

### 3. Composition/Information on ingredients

Substance/Mixture : Substance

Chemical name or commercial name

: 1,3-Diallylimidazolium tetrafluoroborate

Ingredients and composition

: 1,3-Diallylimidazolium tetrafluoroborate min. 95%  
2.5% as boron

Chemical formula :  $\text{CH}_2\text{CHCH}_2\text{C}_3\text{H}_3\text{N}_2\text{CH}_2\text{CHCH}_2\text{BF}_4$

CAS No. : 852699-06-0

TSCA Inventory : Not registered

EINECS No. : -

Dangerous and hazardous ingredients

: 1,3-Diallylimidazolium tetrafluoroborate

### 4. First aid measures

Inhalation : Remove the victim to fresh air, and make him blow his nose and gargle. If necessary, get medical treatment.

Skin contact : Wash the affected areas under running water.

Eye contact : Wash the affected areas under running water for at least 15 minutes. Get medical treatment.

Ingestion : Rinse mouth with water. Give the victim one or two glasses of water or milk, do not induce vomiting. Get medical treatment as soon as possible.

### 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 protective equipment and avoid contact with skin and inhalation of vapor. Keep away personnel and perform the operation at upwind area.
- 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 : Remove the spillage by absorption with diatomaceous earth or dry sand. Or else dilute with water gradually and neutralize with calcium hydroxide solution or sodium carbonate solution then wash thoroughly with water.

## 7. Cautions of handling and storage

### Handling

- Engineering measures : Wear proper protective equipment not to contact with skin or inhale the vapor.

### Cautions for safety handling

- : Handle at a well ventilated place.

- Cautions : Do not contact with oxidizing substances.

### 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 : Liquid
- Color : Yellow
- Odor : Slight characteristic odor
- Boiling point : Not available
- Melting point : Not available
- Flash point : Not available
- Specific gravity : Not available
- Solubility
- Solubility in solvents : Water : Soluble



Organic solvents : Sparingly soluble in acetone, chloroform, diethyl ether, dichloromethane, hexane.

#### 10. Stability and reactivity

- Stability : Stable under normal usage.  
Reactivity : May react with oxidizing substances.  
Incompatible conditions : Light, heat  
Hazardous decomposition products : Carbon monoxide, Nitrogen oxide, Fluoride, Hydrogen fluoride

#### 11. Toxicological information

- Acute toxicity : Oral : Not possible to classify because of insufficient data.  
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.  
Skin corrosiveness : Causes severe skin burns and eye damage(category 1A)  
Since causes severe irritation to the skin, it was classified into category 1A.  
Irritation to skin, eyes : Causes serious eye damage(category 1)  
Since causes severe irritation to the eyes, it was classified into category 2.  
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 : Acute aquatic toxicity : Not possible to classify because of insufficient data.  
Chronic aquatic toxicity : Not possible to classify because of insufficient data.  
Rediualbility and degradability : Not available  
Ecorediualbility : Not available  
Mobility : Not available



## 13. Disposal consideration

- Residual disposal : Add the chemical in a large amount of calcium chloride water solution gradually and heat for several hours. Neutralize the solution with sodium hydroxide solution.
- After neutralizing, filter the precipitate and bury in a landfill site approved for hazardous-waste disposal.
- Or entrust approved waste disposal companies with the disposal.
- <Note> : The pH should be more than 8.5, the precipitation does not form completely below pH 8.5.
- The decomposition of tetrafluoroboric acid ion is needed to take several hours.
- Containers : In case of disposal of empty bottles, dispose bottles after removing the content thoroughly.

## 14. Transport information

- UN class : It is not regulated under UN regulations.

## 15. Regulatory information

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

## 16. Other information

- References
- Handbook of dangerous and hazardous chemicals, Japan Industrial Safety & Health Association. (2000-2001)
- Dangerous Properties of Industrial Materials, 6th ed. N. I. Sax Van Nostrand Reinhold Company (1984)
- Handbook of Dangerous Substances Springer-Verlag Tokyo (1991)
- Handbook of 15710 Chemical Products, The Chemical Daily Co. (2010)
- Handbook of Poisonous and Deleterious substances, revised and enlarged edition, Yakumu Kohosa (2000)

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.

