Safety Data Sheet

1. Product and company identification

Product name: XA-2
Name of manufacturer: KANTO CHEMICAL CO., INC.
Address: 2-1, Nihonbashi, Muromachi 2-Chome, Chuo-Ku, Tokyo, 103-0022, Japan
Name of section: Electronic materials division technical department
Telephone number: +81-3-6214-1080
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Mail address: el-info@gms.kanto.co.jp
SDS No.: GE00578

2. Summary of danger and Hazard

GHS classification

Physical and chemical hazard
Explosives: Out of category
Flammable liquids: Out of category
Self-reactive substances and mixtures: 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
Serious eye damage・Eye irritation: Category 2A
Reproductive toxicity: Category 2
Specific target organ systemic toxicity(repeated exposure): Category 1

Pictogram or symbol

Signal word: Danger

Hazard statement: Causes serious eye irritation
Suspected of damaging fertility or the unborn child
Causes damage to organs (thyroid gland, skin, systemic toxicity) through prolonged or repeated exposure

Cautions
Safety measurements: Do not handle until all safety precautions have been read and understood. Do not breathe dust, mist, and vapor. Do not eat, drink or smoke when using this product. Wear appropriate protective gloves, glasses, clothing, face shield, or mask. Wash hands thoroughly after handling.

First-aid measures: If in eyes: Rinse cautiously with water for several minutes. Get medical treatment. Wash hands thoroughly after handling. If exposed or concerned, get medical treatment. Get medical treatment, if you feel unwell.

Storage: Store locked up.

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

3. Composition/Information on ingredients

Substance/Mixture: Mixture

Ingredients and composition:
- Compound A max. 10%
- Compound B max. 1%
- Compound C max. 15%
- Compound D max. 1%
- Compound E max. 1%
- Water min. 72%

Chemical formula:
- Compound A nondisclosure
- Compound B nondisclosure
- Compound C nondisclosure
- Compound D nondisclosure
- Compound E nondisclosure
- Water H2O

CAS No.:
- Compound A nondisclosure
- Compound B nondisclosure
- Compound C nondisclosure
- Compound D nondisclosure
- Compound E nondisclosure
- Water 7732-18-5

TSCA Inventory: Registered

EINECS No.: 2316594

Dangerous and hazardous ingredients:
- Compound A, Compound B, Compound C, Compound D, Compound E

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.

Ingestion: Give the victim water or salt water and induce vomiting. If necessary, get medical attention.

5. Fire fighting measures
Extinguishing media: This product is noncombustible.
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: Absorb spill with inert material (e.g., diatomaceous earth, sand) and 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 vapor.
Cautions for safety handling: Handle the chemical not to generate aerosol, vapor.
Storage
Adequate storage condition: Replace N2 gas, 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): Compound A Not established
Compound B Not established
Compound C Not established
Compound D Not established
Compound E Not established

Protective equipment
Respiration protective equipment
  : If necessary, wear dust mask
Hands protective equipment
  : Impervious protective gloves
Eyes protective equipment
  : Safety goggles

9. Physical and chemical properties
   Appearance : Liquid
   Color : Colorless
   Odor : Slight characteristic odor
   pH : 6.3
   Boiling point : Not available
   Melting point : Not available
   Flash point : Noncombustible
   Auto-ignition point : Not available
   Explosion characteristics
     Explosion limit : Not available
     Specific gravity : Not available
     Solubility
       Solubility in solvents : Water ; Soluble

10. Stability and reactivity
    Stability : Stable under normal usage.
    Reactivity : May react with oxidizing substances.
    Incompatible conditions : Light, heat
    Incompatible materials : Oxidizing substances
    Hazardous decomposition products
      : When heated to decomposition it emits very toxic fumes of I\(^{-}\) and K\(_{2}\)O.
      Carbon monoxide, nitrogen oxides, sulfur oxides

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.
      Toxicity to human is weak, but prolonged intake causes iodine poisoning.
    Skin corrosiveness : Not possible to classify because of insufficient data.
    Irritation to skin, eyes : Causes serious eye irritation(category 2A)
    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:
- Suspected of damaging fertility or the unborn child (category 2)

Specific target organ systemic toxicity single exposure: Not possible to classify because of insufficient data.

Specific target organ systemic toxicity repeated exposure:
- Cause damage to organs (thyroid gland, skin, systemic toxicity) through prolonged or repeated exposure (category 1)

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

12. Ecological information

Ecotoxicity:
- Fish toxicity: Not available

Reduaibility and degradability: Not available

Mobility: Not available

13. Disposal consideration

Residual disposal: Dissolve in a water and dispose of in accordance with applicable laws and local regulations.

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:
- 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. This information 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.