- 1. Chemicals
- .11 Name
 - N, N-dimethylisopropyl amine
- .21 Other methods of identification
 - D MIPA
- 2. Risk overview
- $2.1\ {\rm GHS}$ hazard category

Flammable liquid (Category 2)

Acute toxicity, transoral (category 4)

Acute toxicity, inhalation (category 3)

Skin corrosion (Category 1B)

Severe eye injury (category 1)

Acute aquatic toxicity (category 2)

Chronic aquatic toxicity (Category 2)

2.2 GHS tag elements, including precautionary instructions

| danger | |
|---|--|
| H 225 Highly flammable liquid and vapor H 302 Swallowing is harmful. H 314 Cause serious skin burns and eye damage. H 331 Inspiration will cause poisoning. H 411 Is toxic to aquatic organisms and has long-term lasting effects. | |
| No data | |
| P 210 Keep away from heat sources, sparks, open fires and hot surfacesno smoking. P 233 Keep the container closed. P 240 Ground / equipotential connection between the container and the receiving equipment. The P241 uses explosion-proof electrical / ventilation / lighting equipment. P 242 Only spark tools can be used. P 243 Take measures to prevent electrostatic discharge. P 261 Avoid inhalation of dust / smoke / gas / smoke / vapor / spray. P 264 Clean the skin thoroughly after the operation. P 270 Do not eat, drink, or smoke when using this product. P 271 Can only be used outdoors or in well- ventilated places. P 273 Avoid the release into the environment. P 280 Wear protective gloves / protective clothing / goggles / mask. | |
| P 301 + P 330 + P 331 If swallowed by mistake: gargle. Do not induce vomiting. P 303 + P 361 + P 353 such as skin (or hair) contamination: immediately remove / remove all contaminated clothing. Wash the skin / shower with water. | |
| | |

| contact lenses and can easily remove, remove the contact lenses, and then continue |
|--|
| to rinse. |
| P 310 Call the poisoning control center or the doctor immediately. |
| P 321 For specific treatment (see the first aid instructions provided on this label). |
| P 363 The stained clothes can be reused before cleaning. |
| P 370 + P 378 Fire: use dry sand, dry chemicals or alcohol-resistant foam to put out the fire. |
| P 391 Collect the spillage. |

| lay in | The P403 + P 233 is stored in a well-ventilated place. Keep the container closed. The P 403 + P235 is stored in a well-ventilated place. Keep the low temperature. P 405 Storage place must be locked. | |
|-------------------|--|--|
| Waste disposal | P 501 Treat the contents / containers to the approved waste treatment plant. | |

2.3 Other hazardous substances

No data

3. Composition / composition information

```
common namé MIPA
molecular formula:
formula weight<sub>16</sub>
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| component | | Concentration or concentration range |
|----------------------------|-----------|--------------------------------------|
| N,N-Dimethylisopropylamine | | |
| CAS No . | 996-35-0 | - |
| CAS No. EC-number | 213-635-5 | |

4. First-aid measures

4.1 Description of the necessary first-aid measures

| General advice |
|---|
| Consult the doctor. Show this safety technical manual to the doctor on the scene. |
| inhalation |
| If inhaled, move the patient to fresh air. If breathing stops, give it to artificial respiration. Consult the doctor. |
| skin exposure |
| Remove the contaminated clothes and shoes immediately. Rlush with soap and plenty of water. Immediately transport the patient to the hospital. Consult the doctor. |
| eye contact |
| Rinse thoroughly with large amounts of water for at least 15 minutes and consult a doctor. |
| ingestion |
| No vomiting. Do not feed the unconscious person anything from his mouth. Wash your mouth with water. Consult the doctor. |

4.2 The most important symptoms and health effects

The substance causes great damage to the mucosal tissue and the upper respiratory tract, the eyes, and the skin., Cough, shortness of breath, headache, and nausea

4.3 Instructions and instructions for timely medical treatment and special treatment required

No data

5. Fire protection measures

5.1 Fire-extinguishing medium

Fire extinguishing methods and fire extinguishing agent

Put out the fire with water mist, alcohol-resistant foam, dry powder or carbon dioxide.

5.2 Special hazards arising from this substance or mixture

Carbon oxides, and nitrogen oxides

.35 Advice to the firefighters

If necessary, wear a subsistence respirator to fight the fire.

.45 Further information

Water spray can be used to cool unopened containers.

- 6. Emergency treatment of leakage
- 6.1 Personnel protective measures, protective equipment and emergency handling procedures Wear a breathing hood. Prevent inhalation of steam, aerosol, or gas. Ensure adequate ventilation. Remove all ignition sources. Remove personnel to safe areas. Prevent steam accumulation to reach an explosive concentration, steam can accumulate in low-lying areas.
- 6.2 Environmental protection measures

Take measures to prevent further leakage or spillage while ensuring safety. Do not let the product go into the drain.

Prevent emissions into the surrounding environment.

6.3 Reception and removal methods of leaking chemicals and disposal materials used

Spills are collected with an electric vacuum cleaner or wet brush and placed in a container and handled according to local regulations (see Part 13).

6.4 Reference to other parts

See Section 13 for the discard processing.

- 7. Operation, disposal and storage
- 7.1 Notes for safe operation

Avoid contact with the skin and the eyes. Prevent inhalation of vapor and smoke.

Do not approach the source of the fire.-smoking or open flames prohibited. Take measures to prevent static build-up.

7.2 Conditions for safe storage, including any incompatibility

Store them in a cool place. The container remains closed and stored in a dry, ventilated place.

Open containers must be carefully resealed and kept in vertical position to prevent leakage.

7.3 Specific uses No data

8. Contact control and individual protection

8.1 Allowed concentration

maximum allowable concentration

There are no known state-prescribed exposure limits.

8.2 Exposure control

Appropriate technical controls

Avoid contact with the skin, eyes, and clothing. Wash your hands before you rest and immediately after operating this product.

Individual protective equipment

| Eye protectio n | Use tightly fitted protective glasses by an official standard such as NIOSH (USA) or EN166 (EU) Test and approve the approved equipment for eye protection. |
|-----------------------|--|
| | Wearing gloves and removing gloves must be inspected before use. Remove the gloves (do not touch the external surface of the gloves) and avoid any skin contact with this product. Carefully use the contaminated gloves in accordance with relevant laws and regulations and valid laboratory regulations and procedures. Please wash and blow dry the protective gloves selected for both hands must meet the EU 89 / 686 / EEC |

| | regulations and the EN 376 standard derived from it. |
|-----------|--|
| Body | Full set of anti-chemical reagent work clothes, flame retardant and anti-static protective |
| protectio | |

| Respira tory system | If the risk assessment shows that an air purification gas mask is required, please use the full-mask multifunctional gas mask (US) or AXBEK (EN 14387) gas mask cylinder as a candidate for engineering control. If the gas mask is the only way of protection, a full hood air supply gas mask is used. Use a respirator and parts tested and passed government standards such as NIOSH (US) or CEN (EU). |
|---------------------------|--|
| protect | government standards such as NIOSH (US) or CEN (EU). |

9. Physicochemical characteristics

9.1 Information on the basic physicochemical properties

| Appearance and traits | Shape: transparent, liquid Color: colorless |
|--|--|
| smell | Like amine |
| threshold odour number | No data |
| pH price | And 11.5 at 100 g / 1 at 20 ° C |
| Melting point / setting point | -70 ° C |
| Initial boiling point and boiling course | 65.5 °C at 1,003hPalit. |
| flash point | -27 °C closed cup |
| evaporation rate | No data |
| Flammability (solid, gas) | No data |
| High / low combustion or explosive limits | Upper blast limit: 8.1% (V) Lower blast limit: 1% (V) |
| vapour pressure | And 180 hPa at 20 ° C |
| vapour density | No data |
| Density / relative density | With 0.715 g/cm3 at 25 ° C |
| water-solubility | Completely missolution |
| N-octanol / water distribution coefficient | Log value of the distribution coefficient of octanol-water: 1.2 at 25 $^\circ$ C |
| autogenous ignition temperature | No data |
| decomposition temperature | No data |
| viscosity | No data |

10. Stability and reactivity

10.1 Reactivity

No data

10.2 stability

No data

10.3 Hazardous reaction

No data

10.4 Conditions that should be avoided

Heat, flames, and sparks. Extreme temperatures and direct daylight.

10.5 forbidden compound

Strong oxidant, nitrite, nitric acid

10.6 Hazardous decomposition products

Other breakdown products-no data data

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11. Toxicology data
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11.1 Information on the toxicological impact

| acute toxicity |
|---|
| Half-lethal dose (LD50) was oral-rat-684 mg / kg Inhalation: It may cause gastrointestinal irritation, nausea, vomiting, and diarrhea. |
| Skin corrosion / irritation |
| Skin-rabbit-induced burnsTrial Instructions of the Organization for Economic Cooperation and Development 404 |
| Severe eye injury / eye irritation |
| Eyes-rabbitcan cause serious damage to the eyes. |
| Breathing or skin allergy |
| No data |
| Germ-cell mutagenicity |
| No mutagenesis in the evoked active reagent of Ames. |
| carcinogenicity |
| IARC: No component greater than 0. 1% in this product is identified as a possible or positive human carcinogen by IARC. |
| genotoxicity |
| No data |
| Specific target organ system toxicity (primary contact) |
| No data |
| Specific target organ system toxicity (repeated exposure) |
| No data |
| inhalation hazard |
| No data |
| Potential health implications |
| Inhalation inhalation can cause poisoning. This substance is highly destructive to tissues, mucosa and upper respiratory tract Digestion by estion is harmful to humans. Lead to burns. Skin may be harmful if absorbed through the skin. Causes a skin burn. The eye causes eye burns. |
| Signs and symptoms after exposure |
| The substance causes great damage to the mucosal tissue and upper respiratory tract, eyes and skin, cough, shortness of breath, headache, and nausea Additional instructions |
| Registration of the toxic effects of chemical substances: no data is available |
| |

12. Ecological data

12.1 Ecotoxicity

| | Half lethal concentration (LC50) -golden fish-22-46 mg / 1-96.0 h No data |
|--|--|
| For wâter and other aquatic invertebrates | Semi-lethal effective concentration (EC50) -red-38.4 mg / 1-48 h |
| Toxicity to algae | ErC50 - Algae - 5.38 mg/1 - 72 h |
| Bacterial toxicity | Semi-lethal effective concentration (EC50) -Bacteria-17 mg / 1-48 h |

12.2 Persistence and degradability

| biodegradability | The aerobic-exposure time of 28 d Results: 20-30% -not biodegradation. |
|------------------|---|
|------------------|---|

12.3 Potential bioaccumulability

No data

12.4 Mobility in the soil

No data

12.5 Results of the evaluation of the PBT and vPvB

No data

12.6 Other environmental harmful effects

Toxic to aquatic organisms and have long-term lasting effects.

No data

Chemical oxygen consumption (COD) of 232 mg / g

13. Waste disposal

13.1 Waste treatment method

| product | |
|---|--|
| In a chemical incinerator equipped with afterburner and washing equipment, especially during gnition, because the substance is highly flammable Sexual substances give the remaining and unrecovered solutions to the processing company. | |
| Pollution packaging | |
| Discard them as unused products. | |

14. Transportation information

| information | The European land transport risk regulation | International maritime risk regulations | International air transport risk regulations |
|-----------------------------------|---|---|---|
| UN number | 2733 | 2733 | 2733 |
| transport name | AMINES ,FLAMMABLE ,CORRO SIVE, N.O.S.(N, N- D imethylisopropylamine) | AMINES ,FLAMMABLE ,CORRO SIVE, N.O.S.(N, N- D imethylisopropylamine) | Amines,flammable,corrosive ,n.o.s.(N , N- Dimethylisopropylamine) |
| Transportation hazard category | 3 (8) | 3 (8) | 3 (8) |
| Package group | II | II | II |
| environment hazards | yes | yes | deny |
| Special preventive measures | No data | | |

15. Regulatory information

 $15.1\ {\rm Rules}\ /\ {\rm regulations}\ {\rm specifically}\ {\rm for}\ {\rm the}\ {\rm safety},\ {\rm health}\ {\rm and}\ {\rm environment}\ {\rm of}\ {\rm this}\ {\rm substance}\ {\rm or}\ {\rm mixture}$

Applicable regulations

Please note that waste disposal should also meet local regulations. If applicable, the chemical meets the requirements of the Regulations on the Safety Management of Hazardous Chemicals (passed by The State Council on January 9,2002).