

# SAFETY DATA SHEET

Version 1

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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : ATP-Na (Adenosine 5'-triphosphate disodium salt hydrate)

Product Number : CP-112

### 1.2 Other means of identification

5'-ATP-Na2  
ATPdisodium salhydrate

### 1.3 Recommended use of the chemical and restrictions on use

For research use only. Not intended for diagnostic or therapeutic use.

### 1.4 Details of the supplier of the safety data sheet

IMT Formosa New Materials Co., Ltd.  
Rm. 1, 4F., No. 15, Aly. 15, Ln. 71, Changyu St., Sanmin Dist., Kaohsiung City 807,  
Taiwan (R.O.C.)

### 1.5 Emergency telephone

+886-926159317

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## SECTION 2: Hazards identification

### 2.1 GHS Classification

Not a hazardous substance or mixture.

### 2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

### 2.3 Other hazards – none

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## SECTION 3: Composition/information on ingredients

Substance / Mixture : Substance

### 3.1 Substances

Synonyms : 5'-ATP-Na2  
ATPdisodium salhydrate

Formula :  $C_{10}H_{14}N_5Na_2O_{13}P_3 \cdot xH_2O$

Molecular weight : 551.14 g/mol

CAS-No. : 34369-07-8

EC-No. : 213-579-1

No components need to be disclosed according to the applicable regulations.

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## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

#### If inhaled

After inhalation: fresh air.

**In case of skin contact**

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

**In case of eye contact**

After eye contact: rinse out with plenty of water. Remove contact lenses.

**If swallowed**

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

**4.2 Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**

No data available

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**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing media**

Water Foam Carbon dioxide (CO<sub>2</sub>) Dry powder

**Unsuitable extinguishing media**

For this substance/mixture no limitations of extinguishing agents are given.

**5.2 Special hazards arising from the substance or mixture**

Carbon oxides

Nitrogen oxides (NO<sub>x</sub>)

Oxides of phosphorus

Sodium oxides

Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

**5.3 Advice for firefighters**

In the event of fire, wear self-contained breathing apparatus.

**5.4 Further information**

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

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**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

**6.2 Environmental precautions**

Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up**

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

**6.4 Reference to other sections**

For disposal see section 13.

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## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

For precautions see section 2.2.

### **7.2 Conditions for safe storage, including any incompatibilities**

#### **Storage conditions**

Tightly closed. Dry.

#### **Storage stability**

Recommended storage temperature  
2 - 8 °C

#### **Storage class**

Storage class (TRGS 510): 11: Combustible Solids

### **7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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## **SECTION 8: Exposure controls/personal protection**

### **8.1 Control parameters**

#### **Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

### **8.2 Exposure controls**

#### **Appropriate engineering controls**

Change contaminated clothing. Wash hands after working with substance.

#### **Personal protective equipment**

##### **Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

##### **Respiratory protection**

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

##### **Control of environmental exposure**

Do not let product enter drains.

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## **SECTION 9: Physical and chemical properties**

### **9.1 Information on basic physical and chemical properties**

- |                                 |                                            |
|---------------------------------|--------------------------------------------|
| a) Physical state               | powder                                     |
| b) Color                        | white                                      |
| c) Odor                         | No data available                          |
| d) Melting point/freezing point | e) Initial boiling point and boiling range |

f) Flammability (solid, gas)	Melting point/range: 176 °C - dec.
g) Upper/lower flammability or explosive limits	No data available
	No data available
	No data available
h) Flash point	No data available
i) Autoignition temperature	No data available
j) Decomposition temperature	No data available
k) pH	No data available
l) Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
m) Water solubility	No data available
n) Partition coefficient: n-octanol/water	No data available
o) Vapor pressure	No data available
p) Density	No data available
Relative density	No data available
q) Relative vapor density	No data available
r) Particle characteristics	No data available
s) Explosive properties	No data available
t) Oxidizing properties	none

## 9.2 Other safety information

No data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

### 10.3 Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents

### 10.4 Conditions to avoid

no information available

#### **10.5 Incompatible materials**

No data available

#### **10.6 Hazardous decomposition products**

In the event of fire: see section 5

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### **SECTION 11: Toxicological information**

#### **11.1 Information on toxicological effects**

##### **Acute toxicity**

LD50 Oral - Rat - female - > 2,000 mg/kg  
(OECD Test Guideline 423)

Remarks: (in analogy to similar compounds)

The value is given in analogy to the following substances: adenosine 5'-triphosphate disodium salt

Inhalation: No data available

Dermal: No data available

##### **Skin corrosion/irritation**

Skin - reconstructed human epidermis (RhE)

Result: No skin irritation - 15 min  
(OECD Test Guideline 439)

Remarks: (in analogy to similar products)

The value is given in analogy to the following substances: adenosine 5'-triphosphate disodium salt

##### **Serious eye damage/eye irritation**

No data available

##### **Respiratory or skin sensitization**

No data available

##### **Germ cell mutagenicity**

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Remarks: (in analogy to similar products)

The value is given in analogy to the following substances: adenosine 5'-triphosphate disodium salt

##### **Carcinogenicity**

No data available

##### **Reproductive toxicity**

No data available

##### **Specific target organ toxicity - single exposure**

No data available

##### **Specific target organ toxicity - repeated exposure**

No data available

##### **Aspiration hazard**

No data available

#### **11.2 Additional Information**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

Handle in accordance with good industrial hygiene and safety practice.

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## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to daphnia and other aquatic invertebrates	semi-static test EC50 - Daphnia magna (Water flea) - > 43.8 mg/l - 48 h (OECD Test Guideline 202) Remarks: (in analogy to similar products) The value is given in analogy to the following substances: adenosine 5'-triphosphate disodium salt
Toxicity to algae	static test ErC50 - Desmodesmus subspicatus (green algae) - > 100 mg/l - 72 h (OECD Test Guideline 201) Remarks: (in analogy to similar products) The value is given in analogy to the following substances: adenosine 5'-triphosphate disodium salt

### 12.2 Persistence and degradability

Biodegradability	aerobic - Exposure time 28 d Result: 83 % - Readily biodegradable. (OECD Test Guideline 301F) Remarks: (in analogy to similar compounds) The value is given in analogy to the following substances: adenosine 5'-triphosphate disodium salt
	aerobic - Exposure time 28 d Result: 83 % - Readily biodegradable. (OECD Test Guideline 301F)

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Endocrine disrupting properties

No data available

### 12.7 Other adverse effects

Discharge into the environment must be avoided.

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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

The chemical must be disposed or recycled in accordance with Waste Disposal Act. See [www.epa.gov.tw](http://www.epa.gov.tw) for the information of chemical waste disposal companies and their contacts. Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

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**SECTION 14: Transport information****14.1 UN number**

ADR/RID: -

IMDG: -

IATA-DGR: -

**14.2 UN proper shipping name**

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA-DGR: Not dangerous goods

**14.3 Transport hazard class(es)**

ADR/RID: -

IMDG: -

IATA-DGR: -

**14.4 Packaging group**

ADR/RID: -

IMDG: -

IATA-DGR: -

**14.5 Environmental hazards**

ADR/RID: no

IMDG Marine pollutant: no

IATA-DGR: no

**14.6 Special precautions for user****14.7 Incompatible materials****Further information**

Not classified as dangerous in the meaning of transport regulations.

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**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Occupational Safety and Health Act; Regulations on Occupational Safety and Health Facilities  
Waste Disposal Act; Standards for the Storage, Cleanup, Handling and Disposal of Industrial Waste

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**SECTION 16 : OTHER INFORMATION**

Revision note

No information available

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data  
Sheet**