



## Safety Data Sheet

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### Section 1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Product name: 4-Aminophenol

SDS No. : 0333E-3

Relevant identified uses of the substance or mixture and uses advised against

Research and Development

Details of the supplier of the safety data sheet

Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.

Address: 3-1, Honmachibashi, Chuo-ku, Osaka, JAPAN

Division: Chemical Safety Management Department

Telephone number: +81-6-6946-8061

FAX: +81-6-6946-1607

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### Section 2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

#### HEALTH HAZARDS

Acute toxicity (Oral): Category 4

Serious eye damage/eye irritation: Category 2B

Respiratory sensitization: Category 1

Skin sensitization: Category 1

Germ cell mutagenicity: Category 2

Reproductive toxicity: Category 2

Specific target organ toxicity – repeated exposure: Category 2 (kidneys)

#### ENVIRONMENT HAZARDS

Hazardous to the aquatic environment, short-term (acute): Category 1

Hazardous to the aquatic environment, long-term (chronic): Category 1

(Note) GHS classification without description: Not classified/Classification not possible

Label elements



Signal word: Danger

#### HAZARD STATEMENT

H302 Harmful if swallowed

H320 Causes eye irritation

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

H317 May cause an allergic skin reaction

H341 Suspected of causing genetic defects

H361 Suspected of damaging fertility or the unborn child

H373 May cause damage to organs through prolonged or repeated exposure (kidneys)

H410 Very toxic to aquatic life with long lasting effects

#### PRECAUTIONARY STATEMENT

Prevention



- P202 Do not handle until all safety precautions have been read and understood.  
P273 Avoid release to the environment.  
P260 Do not breathe dust/fume/gas/mist/vapors/spray.  
P284 In case of inadequate ventilation wear respiratory protection.  
P264 Wash contaminated parts thoroughly after handling.  
P280 Wear protective gloves.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Use personal protective equipment as required.  
P270 Do not eat, drink or smoke when using this product.

**Response**

- P391 Collect spillage.  
P314 Get medical advice/attention if you feel unwell.  
P308 + P313 IF exposed or concerned: Get medical advice/attention.  
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor/physician.  
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.  
P362 + P364 Take off contaminated clothing and wash it before reuse.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337 + P313 If eye irritation persists: Get medical advice/attention.  
P330 IF SWALLOWED: Rinse mouth.  
P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.

**Storage**

- P405 Store locked up.

**Disposal**

- P501 Dispose of contents/container in accordance with local/national regulation.

**Specific adverse human health effects**

See "11. Toxicological Information".

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**Section 3. Composition/information on ingredients**

Mixture/Substance selection:

Substance

Ingredient name	Content (%)	CAS No.	ENCS	Chemical formula
4-Aminophenol	98(min)	123-30-8	3-675; 5-3026	NH <sub>2</sub> C <sub>6</sub> H <sub>4</sub> OH

Note : The figures shown above are not the specifications of the product.

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**Section 4. First-aid measures**

Descriptions of first-aid measures

General measures

Get medical advice/attention if you feel unwell.

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Call a POISON CENTER/doctor/physician.

Call a POISON CENTER/doctor/physician if you feel unwell.

IF ON SKIN



Take off immediately all contaminated clothing. Rinse skin with water or shower.

Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

**IF IN EYES**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

**IF SWALLOWED**

Rinse mouth.

Call a POISON CENTER/doctor/physician if you feel unwell.

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**Section 5. Fire-fighting measures**

## Extinguishing media

## Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

## Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

## Specific hazards arising from the substance or mixture

Fire may produce irritating, corrosive and/or toxic gases.

Runoff from fire control or dilution water may cause pollution.

See "10.Stability and Reactivity".

## Advice for firefighters

## Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

## Special protective equipment and precautions for fire-fighters

Wear fire resistant or flame retardant clothing.

Wear protective gloves/protective clothing/eye protection/face protection.

Firefighters should wear self-contained breathing apparatus with a full facepiece operated in the positive pressure mode.

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**Section 6. Accidental release measures**

## Personnel precautions, protective equipment and emergency procedures

Keep unauthorized personnel away.

Ventilate area until material pick up is complete.

Wear proper protective equipment.

## Environmental precautions

Prevent spills from entering sewers, watercourses, low areas or rivers. To be careful not discharged to the environment without being properly handled waste water contaminated.

## Methods and materials for containment and cleaning up

Sweep up, place in a bag and hold for waste disposal.

## Preventive measures for secondary accident

Collect spillage.

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**Section 7. Handling and storage**

## Precautions for safe handling

## Preventive measures

(Exposure Control for handling personnel)



Do not breathe dust/fume/gas/mist/vapors/spray.

(Protective measures against fire and explosion)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(Exhaust/ventilator)

Exhaust/ventilator should be available.

(Safety treatments)

Avoid contact with skin.

Avoid contact with eyes.

#### Safety Measures

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash hands et al thoroughly after handling.

When using do not eat, drink or smoke.

#### Any incompatibilities

See "10.Stability and Reactivity".

#### Advice on general occupational hygiene

Wash contaminated parts thoroughly after handling.

Do not eat, drink or smoke when using this product.

Contaminated work clothing should not be allowed out of the workplace.

Take off contaminated clothing and wash it before reuse.

#### Storage

##### Conditions for safe storage

Keep container tightly closed.

Store locked up. (P405)

Chilled storage.

Keep container protect from light.

Storage in accordance with local/national regulation.

##### Container and packaging materials for safe handling

Use closed unbreakable containers.

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## Section 8. Exposure controls/personal protection

#### Control parameters

Control value and concentration standard value are not available in ISHA.

#### Adopted value

(Other inorganic and organic dust (third class dust ))

JSOH Respirable dust 2mg/m<sup>3</sup>, Total dust 8mg/m<sup>3</sup>

#### Exposure controls

##### Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

##### Individual protection measures

Recommend to use protective equipment in conformity with the standards.

Use appropriate protective equipment in accordance with local/national regulation.

##### Respiratory protection

Wear respiratory protection (dust-proof mask/gas mask). Select chemical cartridge corresponding to type of gases when using a gas mask.

##### Hand protection



Wear impervious protective glove.

Eye protection

Wear eye/face protection. Wear safety goggles in cases gas is generated.

Skin and body protection

Wear protective clothing.

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## Section 9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state: Crystalline powder

Color: White to light brown

Odor data is not available.

Melting point/Freezing point: 187°C

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

Flammability (gases, liquids and solids) data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Flash point data is not available.

Auto-ignition temperature data is not available.

Decomposition temperature data is not available.

pH data is not available.

Kinematic viscosity data is not available.

Solubility:

Solubility in water: 1.11g/100ml (0°C)

Solubility in solvent data is not available.

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density data is not available.

Relative vapor density (Air=1) data is not available.

Particle characteristics data is not available.

Other information

Other information is not available.

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## Section 10. Stability and Reactivity

Reactivity

Not available.

Chemical stability

Stable under normal storage/handling conditions.

Possibility of hazardous reactions

Not available.

Conditions to avoid

Contact with incompatible materials.

Contact with fire source.

Incompatible materials

Acids, Oxidizing agents

Hazardous decomposition products

Carbon oxides, Nitrogen oxides

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**Section 11. Toxicological Information**

## Information on toxicological effects

## Acute toxicity

## Acute toxicity (Oral)

## [Product]

Category 4, Harmful if swallowed

## [Data for components of the product]

[GHS Cat. Japan, base data]

rat LD50=671mg/kg (SIDS, 2010)

## Acute toxicity (Dermal)

## [Data for components of the product]

[GHS Cat. Japan, base data]

rat LD50&gt;8000mg/kg (HSDB, Access on May 2017)

## Irritant properties

## Skin corrosion/irritation

## [Data for components of the product]

[GHS Cat. Japan, base data]

rabbit mild irritation (SIAP, 2010; HSDB, Access on May 2017)

## Serious eye damage/irritation

## [Product]

Category 2B, Causes eye irritation

## [Data for components of the product]

[GHS Cat. Japan, base data]

human irritating (HSDB, Access on May 2017); rabbit mild (SIAP, 2010; HSDB, Access on May 2017)

## Sensitization

## Respiratory sensitization

## [Product]

Category 1, May cause allergy or asthma symptoms or breathing difficulties if inhaled

## [Data for components of the product]

[GHS Cat. Japan, base data]

cat. 1; HSDB, Access on May 2017

## Skin sensitization

## [Product]

Category 1, May cause an allergic skin reaction

## [Data for components of the product]

[GHS Cat. Japan, base data]

cat. 1; Contact Dermatitis 5th ed., 2011; SCCS, 2011

## Germ cell mutagenicity

## [Product]

Category 2, Suspected of causing genetic defects

## [Data for components of the product]

[GHS Cat. Japan, base data]

cat. 2; JECDB, Access on May 2017; SIDS, 2010; PATTY 6th, 2012; NTP DB, Access on May 2017

## Carcinogenic effects data is not available.

## Reproductive toxicity

## [Product]

Category 2, Suspected of damaging fertility or the unborn child

## [Data for components of the product]



[GHS Cat. Japan, base data]

cat. 2; JECDB, Access on May 2017; SIDS, 2010; SCCS, 2011; MOE risk assessment vol.5, Temporary risk assessment Sheet, 2006; PATTY 6th, 2012

Specific target organ toxicity (STOT)

STOT-single exposure data is not available.

STOT-repeated exposure

[Product]

Category 2, May cause damage to organs through prolonged or repeated exposure

[Data for components of the product]

[cat.2]

[GHS Cat. Japan, base data]

kidneys (MOE Environmental Risk Assessment for Chemical Substances vol.5, Temporary risk assessment sheet, 2006; PATTY 6th, 2012)

Aspiration hazard data is not available.

Information on other hazards

May cause lung disorders by massive inhalation of powdered substance.

-e.g. fibrosis of lung tissue, cough, sputum, breath shortness, dyspnea, decline of lung function, interstitial lung disease, pneumothorax

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## Section 12. Ecological Information

Toxicity

Aquatic toxicity

[Product]

Category 1, Very toxic to aquatic life

Category 1, Very toxic to aquatic life with long lasting effects

[Data for components of the product]

Hazardous to the aquatic environment, short-term (acute)

[GHS Cat. Japan, base data]

Algae (*Pseudokirchneriella subcapitata*) EC50 (Growth rate)=0.10mg/L/72hr (MOE Japan, 2017)

Hazardous to the aquatic environment, long-term (chronic)

[GHS Cat. Japan, base data]

Algae (*Pseudokirchneriella subcapitata*) NOEC (Growth rate)=0.025mg/L/72hr (MOE Japan, 2017)

Persistence and degradability

[Data for components of the product]

BOD\_Degradation : 6% (METI existing chemical safety inspections, 1997)

Bioaccumulative potential

[Data for components of the product]

BCF=46 (Check & Review, Japan)

Mobility in soil

Mobility in soil data is not available.

Other adverse effects

Ozone depleting chemical data is not available.

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## Section 13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

Waste treatment methods

Avoid release to the environment.



Dispose of contents/container as industrial waste. Accordance with local/national regulation.

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**Section 14. Transport Information**

UN Number or ID Number : 2512

UN Proper Shipping Name :

AMINOPHENOLS (o-, m-, p-)

Class or division (Transport hazard class) : 6.1

Packing group : III

ERG GUIDE No.: 152

IMDG Code (International Maritime Dangerous Goods Regulations)

UN Number or ID Number : 2512

UN Proper Shipping Name :

AMINOPHENOLS (o-, m-, p-)

Class or division (Transport hazard class) : 6.1

Packing group : III

IATA (Dangerous Goods Regulations)

UN Number or ID Number : 2512

UN Proper Shipping Name :

AMINOPHENOLS (o-, m-, p-)

Class or division (Transport hazard class) : 6.1

Hazard labels : Toxic

Packing group : III

Environmental hazards

Marine pollutants (yes/no) : yes

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**Section 15. Regulatory Information**

Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Toxic Substances Control Act (TSCA) Inventory

Chemicals listed in TSCA Inventory

Applicable

Other regulatory information

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

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**Section 16. Other information**

References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 22nd edit., 2021 UN

IMDG Code, 2022 Edition (Incorporating Amendment 41-22)

IATA Dangerous Goods Regulations (65th Edition) 2024

2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2024 TLVs and BEIs. (ACGIH)

JIS Z 7252 : 2019

JIS Z 7253 : 2019

2023 Recommendation on TLVs (JSOH)

Supplier's data/information



**General Disclaimer**

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Unauthorized translation or modification is prohibited.

Please provide SDS to customers for selling or transferring.

All chemicals have unknown hazard. Handle the product with care.

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Japan official data (NITE published in 2022).