GPS Safety Summary
4-amino-N-(2,4-diaminophenyl)-Benzamide

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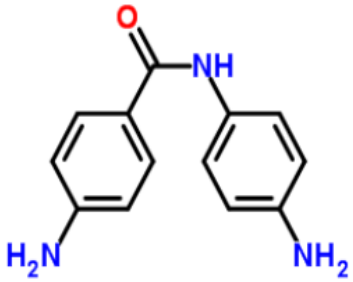
1. General Statements

4-amino-N-(2,4-diaminophenyl)-Benzamide is likely a solid at room temperature (common for substituted benzamides).Expected to be polar due to amide and amino groups.Solubility: Possibly soluble in polar solvents such as water, DMSO, or ethanol.

2. Chemical identification.

Name :4-amino-N-(2,4-diaminophenyl)-Benzamide
CAS number(s) :60779-50-2
EC number :Not Available
Molecular formula :C13H14N4O
Structure :



3. Uses and Benefits

Compounds like this are often studied in medicinal chemistry for their potential bioactivity, including as enzyme inhibitors or receptor ligands.Aminobenzamides have been explored in pharmaceutical development, sometimes as kinase inhibitors or for other therapeutic targets.

4. Physical / chemical properties

Property	Value
Physical state :	Solid
Colour :	Coureless
Odour :	Odourless
pH :	NA
Melting point :	206 to 209 °C
Boiling point :	430.9 ± 45.0 °C
Flash point :	Not applicable
Density :	1.383 ± 0.06 g/cm3
Solubility in Water:	NDA.

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5. Health Effects

Effect Assessment	Result
Acute toxicity (Oral / inhalation / dermal)	NA
Irritation / corrosion Skin / eye/ respiratory tract	NA
Respiratory or skin sensitisation	May cause an allergic skin reaction
Toxicity after repeated exposure Oral / inhalation / dermal	NA
Genotoxicity / Mutagenicity	May cause genetic defects. Causes damage to organs.
Carcinogenicity	It may cause cancer.
Toxicity for reproduction	NA

6. Environmental Effects

Effect Assessment	Result
Aquatic toxicity	No
Fate and behavior	**Result**
Persistence and degradability	Not rapidly degradable
Bioaccumulative potential	No additional information available.

7. Exposure

Human health

4-amino-N-(2,4-diaminophenyl)-Benzamide is a chemical compound that poses serious health risks. It may cause genetic defects, may cause an allergic skin reaction, damage to organs, and has the potential to cause cancer(carcinogenicity). Due to these hazards, it must be handled with extreme caution, following strict safety protocols to minimize exposure and protect human health..The exposure must be kept as minimum as possible by the use of appropriate risk management measures suitable collective and personal protective equipment, good industrial hygiene practices and risk communication through appropriate training of workers.Careless handling or accidental spillage of the chemical could result in exposure to potentially hazardous levels of chemicals.Industrial workers should ensure that they follow the advice found in the extended safety data sheet (SDS).

Environment:

Care should be taken to avoid releases of these products to sewage, drainage systems and water bodies. Spillage shall be quickly collected in the event of an accidental release. More information about release measures and accidental release measures are available in the extended safety data sheet.

8. Risk Management Recommendations

Human health measures.

Organizational	A basic standard of occupational hygiene is recommended. Ensure operatives are well informed of the hazards and trained to minimise exposures. Ensure regular inspection and maintenance of equipment and machines. Handle and store according to the indications of the Safety Data Sheet.	
Protection	Eye protection:	Safety glasses
	Skin and body protection:	Wear suitable protective clothing
	Respiratory protection:	[In case of inadequate ventilation] wear respiratory protection.
Engineering controls	Ensure good ventilation of the work station..	
Environment protective measures		
Avoid release to the environment		

9. First-aid measures

First-aid measures after inhalation : Remove the person to fresh air and keep them comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

Extinguishing media
Suitable extinguishing media : Water spray. Dry powder. Foam..
Unsuitable extinguishing media : Do not use a heavy water stream.

Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: seal off low-lying areas. Exposure to fire/heat: have neighbourhood close doors and windows.

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.

11. Accidental release measures

Protective equipment : suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Environmental precautions : Avoid release to the environment. Notify authorities if a product enters sewers or public waters.

For containment : Using a clean shovel, put the material in a dry container and cover without compressing it.

12. Disposal consideration

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations : Disposal must be done according to official regulations.

13. Handling and storage

Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle it until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product in the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers.Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors,walls and other surfaces in the hazard area must be cleaned regularly. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

Hygiene measures : Separate working clothes from town clothes. Launder separately. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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14. Classification and Labeling

Hazard pictograms (GHS US)	:	
Signal word (GHS US)	:	Danger
Hazard statements (GHS US)	:	H317 - May cause an allergic skin reaction H340 - May cause genetic defects. H350 - May cause cancer. H371 - May cause damage to organs.
Precautionary statements (GHS US)	:	P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P260 - Do not breathe dust, fume, gas, mist, vapors, spray. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P272 - Contaminated work clothing must not be allowed out of the workplace. P280 - Wear protective gloves, protective clothing, eye and face protection. P302+P352 - If on skin: Wash with plenty of water. P308+P311 - If exposed or concerned: Call a POISON CENTER, a doctor. P308+P313 - If exposed or concerned: Get medical advice/attention. P321 - Specific treatment (see supplemental first aid instruction on this label). P333+P313 - If skin irritation or rash occurs: Get medical advice or attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P405 - Store locked up. P501 - Dispose of hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

15. Conclusion

4-amino-N-(2,4-diaminophenyl)-benzamide is a solid, colorless, odorless organic compound with multiple amino groups and an amide functional group, making it polar and likely soluble in polar solvents. It has potential applications in medicinal chemistry, particularly as an enzyme inhibitor or therapeutic agent.However, this compound poses significant health hazards, including potential genetic toxicity, carcinogenicity, and the ability to cause allergic skin reactions. These risks necessitate stringent handling procedures, use of personal protective equipment, and strict adherence to occupational hygiene standards to minimize exposure.Environmental precautions are equally important, as the compound is not readily biodegradable and should be prevented from entering waterways or sewage systems. Proper disposal and containment measures must be implemented to avoid environmental contamination.The exposure must be kept as minimum as possible by the use of appropriate risk management measures as suitable collective and personal protective equipment, good industrial hygiene practices and risk communication through appropriate training of workers.

16. Contact Information within company

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This GPS safety summary is intended to give general information about the health, safety and environment and not intended to provide in-depth details. To obtain the most accurate and current information, consult the appropriate Safety Data Sheet (SDS) prior to use of the material named herein.