

Material Safety Data Sheet – Ultra-Pure ADP

EMERGENCY # FOR NATIONAL RESPONSE CENTER (800) 424-8802

Section 1. PRODUCT IDENTIFICATION

Product Name: Adenosine 5'-diphosphate sodium salt

Product Number: ADP100-2 or ADP100-3

CAS-No. 20398-34-9

Section 2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards

No known OSHA hazards

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS).

HMIS Classification

Health hazard: 0

Flammability: 0

Physical hazards: 0

NFPA Rating

Health hazard: 0

Fire: 0

Reactivity Hazard: 0

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Ingestion May be harmful if swallowed.

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: ADP

Formula: C₁₀H₁₅N₅O₁₀P₂

Molecular Weight: 427.20 g/mol

No ingredients are hazardous according to OSHA criteria.

Section 4. FIRST AID MEASURES

If inhaled, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact, wash off with soap and plenty of water.

In case of eye contact, flush eyes with water as a precaution.

If swallowed, never give anything by mouth to an unconscious person. Rinse mouth with water.

Section 5. FIREFIGHTING MEASURES

Conditions of flammability

Not flammable or combustible.

Suitable extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for firefighters:

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NO_x), Phosphorous oxides

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NO_x), Oxides of phosphorus

Section 6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid dust formation. Avoid breathing vapors, mist or gas.

Environmental precautions

No special environmental precautions required.

Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7. HANDLING AND STORAGE

Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: -20 °C

Hygroscopic.

Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection

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

Skin and body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

General industrial hygiene practice.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form solid

Color

No data available

Safety data

pH

No data available

Melting

Point/Freezing point

No data available

Boiling point no data available

Flash point no data available

Ignition temperature no data available

Auto-ignition

Temperature

No data available

Lower explosion limit: no data available

Upper explosion limit: no data available

Vapor pressure no data available

Density no data available

Water solubility no data available

Partition coefficient:

N-Octanol/Water

No data available

Relative Vapor density

No data available

Odor

No data available

Odor Threshold
No data available
Evaporation rate
No data available

Section 10. STABILITY AND REACTIVITY

Chemical Stability

Stable under recommended storage conditions

Possibility of hazardous reactions

No data available

Conditions to avoid

Avoid moisture.

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NO_x), Phosphorous oxides

Other decomposition products - no data available

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NO_x), Oxides of phosphorus

Section 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50

No data available

Inhalation LC50

No data available

Dermal LD50

No data available

Other information on acute toxicity

No data available

Skin corrosion

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available

Teratogenicity

No data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

No data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

No data available

Aspiration hazard

No data available

Potential health effects

Inhalation

May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion

May be harmful if swallowed.

Skin

May be harmful if absorbed through skin. May cause skin irritation.

Eyes

May cause eye irritation.

Signs and Symptoms of Exposure

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

Synergistic effects

No data available

Additional Information

RTECS: Not available

Section 12. ECOLOGICAL INFORMATION

Toxicity

No data available

Persistence and degradability

No data available

Bio-accumulative potential

No data available

Mobility in soil

No data available

PBT and vPvB assessment

No data available

Other adverse effects

No data available

Section 13. DISPOSAL CONSIDERATIONS

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

Section 14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

Section 15. REGULATORY INFORMATION

OSHA Hazards

No known OSHA hazards

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold

(De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards

Massachusetts Right to Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right to Know Components

Adenosine 5'- (trihydrogen diphosphate), sodium salt

CAS-No. 20398-34-9

Revision Date

New Jersey Right to Know Components

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California Prop. 65 Components



This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

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