

**** MATERIAL SAFETY DATA SHEET ****

Adenosine 5'-Triphosphate Disodium Salt Trihydrate
 00385

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: Adenosine 5'-Triphosphate Disodium Salt Trihydrate

Catalog Numbers:
 BP413 25, BP413-25, BP41325

Synonyms:
 Adenosine 5'-triphosphate disodium salt
 Company Identification: Fisher Scientific
 1 Reagent Lane
 Fairlawn, NJ 07410

For information, call: 201-796-7100
 Emergency Number: 201-796-7100
 For CHEMTREC assistance, call: 800-424-9300
 For International CHEMTREC assistance, call: 703-527-3887

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	EINECS#
51963-61-2	ATP Disodium trihydrate	100	unlisted

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: white.
 Caution! This is expected to be a low hazard for usual industrial handling. May cause eye and skin irritation. May cause respiratory and digestive tract irritation.
 Target Organs: None known.

Potential Health Effects

Eye: Dust may cause mechanical irritation.
 Skin: May cause skin irritation. Low hazard for usual industrial handling.
 Ingestion: Ingestion of large amounts may cause gastrointestinal irritation. Expected to be a low ingestion hazard.
 Inhalation: May cause respiratory tract irritation. Low hazard for usual industrial handling.
 Chronic: No information found.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
 Skin: Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.
 Ingestion: Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupsful of milk or water. Get medical aid.
 Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.
 Notes to Physician: Treat symptomatically and

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
 Extinguishing Media: For small fires, use water spray, dry chemical, carbon dioxide or chemical foam.

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated in Section 8.
 Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions.

Provide ventilation.

**** SECTION 7 - HANDLING and STORAGE ****

Handling: Use with adequate ventilation. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Store in a cool, dry place. Keep from contact with oxidizing materials.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
ATP Disodium trihyd rate	none listed	none listed	none listed

OSHA Vacated PELs:
 ATP Disodium trihydrate:
 No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
 Skin: Wear appropriate gloves to prevent skin exposure.
 Clothing: Wear appropriate protective clothing to minimize contact with skin.
 Respirators: Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State: Solid
 Appearance: White
 Odor: None reported
 pH: Not available.
 Vapor Pressure: Negligible.
 Vapor Density: Not available.
 Evaporation Rate: Negligible.
 Viscosity: Not available.
 Boiling Point: Not available.
 Freezing/Melting Point: Not available.
 Autoignition Temperature: Not applicable.
 Flash Point: Not applicable.
 NFPA Rating: (est.) Health: 1; Flammability: 0; Reactivity: 0
 Explosion Limits, Lower: Not available.
 Upper: Not available.
 Decomposition Temperature: Appreciable.
 Solubility: Not available.
 Specific Gravity/Density: C10H14N5O13P3Na2.3H2O
 Molecular Formula: 605.0649
 Molecular Weight:

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability: Materials containing similar functional groups can decompose at elevated temperatures.
 Conditions to Avoid: Dust generation, excess heat, oxidizers.
 Incompatibilities with Other Materials: Strong oxidizers.
 Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.
 Hazardous Polymerization: Has not been reported.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:

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CAS# 51963-61-2 unlisted.
LD50/LC50:
Not available.
Carcinogenicity:
ATP Disodium trihydrate -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Epidemiology:
No information available.
Teratogenicity:
No information available.
Reproductive Effects:
Has been shown to cause reproductive effects in rats. Has been shown to cause musculoskeletal abnormalities in rats.
Neurotoxicity:
No information available.
Mutagenicity:
No information available.
Other Studies:
See actual entry in RTECS for complete information.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste.
US EPA guidelines for the classification determination are listed in 40 CFR Part 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT
No information available
Canadian TDG
No information available.

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL

TSCA

CAS# 51963-61-2 is not on the TSCA Inventory. It is a hydrate and exempt from TSCA inventory requirements (40CFR720.3(u)(2)).
Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.
Section 12b
None of the chemicals are listed under TSCA Section 12b.
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)
None of the chemicals in this material have an RQ.
Section 302 (TPQ)
None of the chemicals in this product have a TPQ.
Section 313
No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

ATP Disodium trihydrate is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California No Significant Risk Level:

None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available.

Risk Phrases:

Safety Phrases:

WGK (Water Danger/Protection)

CAS# 51963-61-2: No information available.

United Kingdom Occupational Exposure Limits

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Canada

None of the chemicals in this product are listed on the DSL/NDSL list. This product has a WHMIS classification of Not controlled.
CAS# 51963-61-2 is not listed on Canada's Ingredient Disclosure List.
Exposure Limits

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 7/12/1999 Revision #1 Date: 8/02/2000

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.