

SAFETY DATA SHEET

Version 1.0
Revision Date 09/29/2026
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SECTION 1. IDENTIFICATION

1.1 Product identifiers

Product name : **Aminotadalafil 20 mg/mL Solution (30 mL)**
Product Number : AMINOTADA-30ML
Brand : 4AminoLabs
CAS-No. (active) : 385769-84-6
Reference batch : See container label

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

Identified uses : Laboratory research and analytical reference use.
Uses advised against : Not for human or veterinary use. Not a drug, dietary supplement, food, or cosmetic.
Supplied under the TSCA R&D Exemption (40 CFR Section 720.36); it is the recipient's responsibility to comply with the requirements of the R&D exemption.

1.3 Details of the supplier of the safety data sheet

Company : 4AminoLabs
1001 S. Main Street, STE 600
Kalispell, MT 59901
UNITED STATES
Telephone : +1 (256) 472-1983
E-mail : sales@4aminolabs.com
Website : www.4aminolabs.com

1.4 Emergency telephone number

Emergency Phone # : Poison Control Center (US): 1-800-222-1222 (24 hours/day, 7 days/week)

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids : Category 4
Reproductive toxicity : Category 2
Reproductive toxicity (effects on or via lactation) : Additional category

Classification is based on the actual concentrations of the ingredients in the finished product (GHS mixture rules). The combustible-liquid classification is applied conservatively on the basis of the dimethyl sulfoxide component.

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H227 Combustible liquid.
H361 Suspected of damaging fertility or the unborn child.
H362 May cause harm to breast-fed children.

Precautionary statements

Prevention:

P210 Keep away from flames and hot surfaces. No smoking.
P203 Obtain, read and follow all safety instructions before use.
P263 Avoid contact during pregnancy and while nursing.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P318 IF exposed or concerned, get medical advice.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

P403 Store in a well-ventilated place.
P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

Dimethyl sulfoxide readily penetrates the skin and may carry dissolved substances, including the active ingredient, into the body. Avoid all skin contact. Persons who are pregnant, breast-feeding, or may become pregnant should not handle this product.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture (solution)

Components

Chemical name	CAS-No.	Concentration
Aminotadalafil Synonyms: amino tadalafil; (6R,12aR)-2-amino-6-(1,3-benzodioxol-5-yl)-2,3,6,7,12,12a-hexahydropyrazino[1',2':1,6]pyrido[3,4-b]indole-1,4-dione Formula: C ₂₁ H ₁₈ N ₄ O ₄ Molecular weight: 390.40 g/mol	385769-84-6	approx. 20 mg/mL (600 mg per 30 mL)
Polyethylene glycol 400 (PEG-400)	25322-68-3	Balance
Dimethyl sulfoxide (DMSO)	67-68-5	Withheld (trade secret)

Solvent proportions are withheld as trade secret.

SECTION 4. FIRST AID MEASURES

General advice	: Show this safety data sheet to the doctor in attendance.
If inhaled	: After inhalation: fresh air. Call in physician if symptoms develop.
In case of skin contact	: Take off immediately all contaminated clothing. Rinse skin with plenty of water/ shower. Consult a physician.
In case of eye contact	: After eye contact: rinse out with plenty of water for at least 15 minutes. Remove contact lenses. Consult an ophthalmologist.
If swallowed	: After swallowing: rinse mouth, make victim drink water (two glasses at most). Do not induce vomiting. Consult a physician.
Most important symptoms and effects, both acute and delayed	: As a PDE5 inhibitor analog, significant exposure may cause headache, flushing, dizziness, and a drop in blood pressure. See section 11.
Protection of first-aiders	: For personal protection see section 8.
Notes to physician	: Treat symptomatically. Aminotadalafil is a structural analog of tadalafil (PDE5 inhibitor). Hypotensive effects may be potentiated by organic nitrates or alpha-blockers. The DMSO carrier may increase absorption through the skin.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Water spray, alcohol-resistant foam, dry powder, carbon dioxide (CO ₂).
Unsuitable extinguishing media	: Do not use a solid water stream as it may scatter and spread fire.
Specific hazards during firefighting	: Combustible liquid. Vapours may form explosive mixtures with air on intense heating.
Hazardous combustion products	: Carbon oxides Nitrogen oxides (NO _x) Sulfur oxides
Further information	: Cool closed containers exposed to fire with water spray. Prevent fire extinguishing water from contaminating surface water or the ground water system.
Special protective equipment for firefighters	: In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Advice for non-emergency personnel: Avoid substance contact. Avoid inhalation of vapours and aerosols. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders: For personal protection see section 8.
Environmental precautions	: Do not let product enter drains. Prevent release to the environment.
Methods and materials for containment and cleaning up	: Take up with liquid-absorbent material (e.g. vermiculite, sand, universal binder). Place in a closed, labeled container. Clean the affected area with soap and water. Dispose of properly (see section 13).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	: For precautions see section 2. Handle only by qualified personnel in a laboratory setting. Work in a fume hood when transferring or aliquoting. Avoid contact with skin and eyes. Keep away from open flames and hot surfaces.
Hygiene measures	: Change contaminated clothing immediately. Wash hands after working with substance. Do not eat, drink, or smoke in work areas.
Further information on storage conditions	: Tightly closed. Protect from light. Store upright in a well-ventilated place. Store locked up or in an area accessible only to qualified or authorized persons.
Storage class	: 10, Combustible liquids
Recommended storage temperature	: 68 - 77 °F / 20 - 25 °C
Materials to avoid	: Strong oxidizing agents, strong acids, strong bases, acid chlorides, strong reducing agents.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Component	CAS-No.	Value type	Control parameter	Basis
Aminotadalafil	385769-84-6	-	No established limit	-
Polyethylene glycol 400 (PEG-400)	25322-68-3	-	No established limit	-
Dimethyl sulfoxide	67-68-5	TWA	250 ppm	AIHA WEEL
Engineering measures	: Use a fume hood when transferring, heating, or aerosolizing. Provide an eyewash station and safety shower.			

Personal protective equipment

Respiratory protection	: Not required under normal use in a fume hood. If vapours or aerosols are generated, use a NIOSH-approved respirator with organic vapour cartridges and P100 prefilters.
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Hand protection	: Full contact: Material: Butyl rubber, minimum layer thickness 0.7 mm. Splash contact: Material: Nitrile rubber, minimum thickness 0.11 mm; change gloves immediately after contamination. Remarks: DMSO permeates many glove materials; inspect before use.
Eye protection	: Chemical splash goggles or safety glasses with side shields tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
Skin and body protection	: Laboratory coat. Impervious clothing as needed for the task.
Hygiene measures	: Change contaminated clothing. Wash hands after working with substance.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Liquid, viscous solution
Color	: Colorless to pale yellow
Odor	: Slight, garlic-like (DMSO)
Odor Threshold	: No data available
pH	: No data available
Melting point/freezing point	: No data available
Boiling point/boiling range	: No data available
Flash point	: No data available for the mixture. Dimethyl sulfoxide: 87 °C (189 °F) closed cup; PEG-400: > 170 °C (> 338 °F).
Evaporation rate	: No data available
Flammability (solid, gas)	: Not applicable
Upper/lower explosion limit	: No data available
Vapor pressure	: No data available
Relative vapour density	: No data available
Relative density	: approx. 1.1
Water solubility	: Solvent carrier is miscible with water; insoluble (aminotadalafil)
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: None
Molecular weight	: 390.40 g/mol (aminotadalafil)
Nominal concentration	: approx. 20 mg/mL; (600 mg per 30 mL)

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No data available
Chemical stability	: The product is chemically stable under standard ambient conditions (room temperature). PEG-400 and DMSO are hygroscopic.
Possibility of hazardous reactions	: Dimethyl sulfoxide may react violently with strong oxidizing agents and acid chlorides.
Conditions to avoid	: Heat, flames, sparks, direct light, moisture.
Incompatible materials	: Strong oxidizing agents, strong acids, strong bases, acid chlorides, strong reducing agents.
Hazardous decomposition products	: In the event of fire: see section 5

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Not classified for this solution (calculated from the 2 % active content). Pure aminotadalafil: Acute Tox. 4 (Oral).

Skin corrosion/irritation

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 component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component 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 component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity

Suspected of damaging fertility or the unborn child. May cause harm to breast-fed children. Classification based on supplier data for aminotadalafil.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Solvent carrier

Dimethyl sulfoxide and polyethylene glycol 400 have low acute toxicity. Dimethyl sulfoxide enhances dermal absorption of dissolved substances.

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.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

Pharmacologically active substance; avoid release to the environment. This product neither contains, nor was manufactured with, a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A + B).

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

- Waste from residues : Waste material must be disposed of in accordance with national, state, and local regulations using a licensed waste disposal contractor. Collect as non-halogenated organic solvent waste. Leave chemicals in original containers. No mixing with other waste. Do not pour down the drain.
- Contaminated packaging : Handle uncleaned containers like the product itself.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

National Regulations

49 CFR (DOT)

Not regulated as a dangerous good in non-bulk packaging (combustible liquid, 49 CFR 173.150(f)).

Poison Inhalation Hazard : No

Special precautions for user : Keep away from heat and ignition sources during transport.

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 302 / 304 Extremely Hazardous Substances

This material does not contain any components with a section 302 EHS TPQ or section 304 EHS RQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
Reproductive toxicity

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.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP) as defined by the U.S. Clean Air Act Section 112 (40 CFR 61), nor any Class I or Class II ODS.

Clean Water Act

This product does not contain any Hazardous Substances listed under Section 311, Table 116.4A, or toxic or priority pollutants under Section 307.

US State Regulations

- Massachusetts Right To Know : No components are subject to the Massachusetts Right to Know Act.
- Pennsylvania Right To Know : No components are subject to the Pennsylvania Right to Know Act.
- New Jersey Right To Know : No components are subject to the New Jersey Right to Know Act.

Maine / Vermont / Washington : Product does not contain any listed chemicals.
Chemicals of High Concern
California Prop. 65 : This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Inventories

TSCA : Product contains substance(s) not listed on the TSCA inventory. Supplied for research and development use only under 40 CFR 720.36.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

AIHA - American Industrial Hygiene Association; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; DOT - Department of Transportation; GHS - Globally Harmonized System; IARC - International Agency for Research on Cancer; IATA-DGR - International Air Transport Association Dangerous Goods Regulations; IMDG - International Maritime Dangerous Goods; LC50 - Lethal Concentration to 50% of a test population; LD50 - Lethal Dose to 50% of a test population; NIOSH - National Institute for Occupational Safety and Health; NTP - National Toxicology Program; ODS - Ozone Depleting Substance; OSHA - Occupational Safety and Health Administration; PPE - Personal Protective Equipment; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; WEEL - Workplace Environmental Exposure Level.

For research use only. Not for human or veterinary use. The information is believed to be correct but is not exhaustive and shall be used solely as a guideline, based on current knowledge of the chemical substance or mixture, and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. 4AminoLabs shall not be held liable for any damage resulting from handling or from contact with the above product. The burden of safe use rests with the user.

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