

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 19.10.2022

Version number 2

Revision: 19.10.2022

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

- **Trade name:** *A-TNA Phosphoramidite*
- **Chemical Identification:** *5'-O-DMT-2'- dA(Bz)-CE Phosphoramidite*

· **Article number:** 4590

· **Registration number**

A registration number is not available for this substance as the substance or its uses are exempted from registration or the annual tonnage does not require a registration.

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

No further relevant information available.

· **Application of the substance / the mixture**

Chemical for research, development, manufacturing, laboratory chemical for analysis.

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

*Biosolve Chimie
20 Rue Roger Husson, 57260 Dieuze, France
Tel: +33 3 878 675 80/81/82/83/84/85
Email: info@biosolvechimie.com*

*Biosolve B.V.
Leenderweg 78, 5555 CE Valkenswaard, the Netherlands.
Tel: +31-(0)40-2071300
Fax: +31-(0)40-2048537
Email: info@biosolve-chemicals.com*

· **Further information obtainable from:** *Product safety department.*

· **1.4 Emergency telephone number:**

Contact list of appointed bodies for information relating to emergency health response, according to Art. 45(1) Reg. (EC) No 1272/2008.

See below section 16 or at <https://poisoncentres.echa.europa.eu/home>.

Help desk: <http://echa.europa.eu/web/guest/support/helpdesks/national-helpdesks/list-of-national-helpdesks>.

Data from: ECHA - EUROPEAN CHEMICALS AGENCY

For more information see section 16.

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**

The substance is not classified, according to the CLP regulation.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008 Void**

· **Hazard pictograms Void**

· **Signal word Void**

· **Hazard statements Void**

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** *Not applicable.*

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· **vPvB:** Not applicable.

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SECTION 3: Composition/information on ingredients

- **3.1 Chemical characterisation: Substances**
- **CAS No. Description**
A-TNA Phosphoramidite
- **Identification number(s)** Not available

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Avoid formation of dust.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Pick up mechanically.
- **6.4 Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special measures required.
- **Information about fire - and explosion protection:** No special measures required.

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- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Store under -18°C.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
- **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).
- **Protection of hands:**
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Not required.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
- **Form:** Solid material
- **Colour:** White to off-white soild.
- **Odour:** Characteristic
- **Odour threshold:** No data available.
- **pH-value:** Not applicable.

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· Change in condition Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	Undetermined.
· Flash point:	Not applicable.
· Flammability (solid, gas):	Product is not flammable.
· Decomposition temperature:	No data available
· Auto-ignition temperature:	No data available
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits: Lower:	No data available
Upper:	No data available
· Vapour pressure:	Not applicable.
· Density:	Not determined.
· Relative density	No data available
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with water:	No data available.
· Partition coefficient: n-octanol/water:	No data available
· Viscosity: Dynamic:	Not applicable.
· 9.2 Other information Molecular Weight	759.8
Molecular Formula	C40H50N5O8P

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
Nitrogen oxides (NO_x)
Phosphorus compounds
Carbon oxides

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SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation** May be harmful if absorbed through skin. May cause skin irritation.
- **Serious eye damage/irritation** May cause eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

* **SECTION 12: Ecological information**

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Observe all federal, state, and local environmental regulations.
Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

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SECTION 14: Transport information

· 14.1 UN-Number · ADR, ADN, IMDG, IATA	Void
· 14.2 UN proper shipping name · ADR, ADN, IMDG, IATA	Void
· 14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA · Class	Void
· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.5 Environmental hazards: · Marine pollutant:	No
· 14.6 Special precautions for user	Not applicable.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**
Substance is not listed.
- **REGULATION (EU) 2019/1148**
- **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**
Substance is not listed.
- **Annex II - REPORTABLE EXPLOSIVES PRECURSORS** Substance is not listed.
- **Regulation (EC) No 273/2004 on drug precursors** Substance is not listed.
- **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**
Substance is not listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Product safety department
- **Contact:**
Austria German Vergiftungsinformations ☐ zentrale 01 406 43 43 <http://www.goeg.at/de/VIZ>
Belgium French Centre antipoison 070 245 245 <http://www.centreantipoisons.be>
Dutch Antigif centrum 070 245 245 <http://www.antigifcentrum.be>
German Giftinformationszentrum 070 245 245 <http://www.poisoncentre.be>

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Bulgaria Bulgarian Токсикологични центрове 02 9154 411 <https://pirogov.eu/bg>*
Croatia Croatian Centar za kontrolu otrovanja +385 1 2348 342 <https://www.imi.hr/en/jedinica/poison-control-centre>*
Czech Rep Czech Toxikologické informační středisko +420 224 91 92 93; +420 224 91 54 02 <http://www.tis-cz.cz>
Denmark Danish Giftlinien +45 8212 1212 <https://www.bispebjerghospital.dk/giflinien>
Estonia Estonian Mürgistusteabekeskus 16662; +372 7943 794 <https://www.16662.ee>
Finland Finnish Myrkytystietokeskus 0800 147 111; +358 9 471 977 <http://www.hus.fi/sairaanhoito/sairaanhoitopalvelut/myrkytystietokeskus/Sivut/default.aspx>
France French Angers +33 2 41 48 21 21 <http://www.centres-antipoison.net/angers/index.html>
Bordeaux +33 5 56 96 40 80 <http://www.centres-antipoison.net/bordeaux/index.html>
Lille +33 0800 59 59 59 <http://www.centres-antipoison.net/lille/index.html>
Lyon +33 4 72 11 69 11 <http://www.centres-antipoison.net/lyon/index.html>
Marseille +33 4 91 75 25 25 <http://www.centres-antipoison.net/marseille/index.html>
Nancy +33 3 83 22 50 50 <http://www.centres-antipoison.net/nancy/index.html>
Paris +33 1 40 05 48 48 <http://www.centres-antipoison.net/paris/index.html>
Strasbourg +33 3 88 37 37 37 <http://www.centres-antipoison.net/strasbourg/index.html>
Toulouse +33 5 61 77 74 47 <http://www.centres-antipoison.net/toulouse/index.html>
Germany German Berlin +49 30 19240 <https://giftnotruf.charite.de>
Bonn +49 228 19240 <http://www.gizbonn.de/index.php?id=272>
Erfurt +49 361 730730 <https://www.ggiz-erfurt.de/home.html>
Freiburg +49 761 19240 <https://www.uniklinik-freiburg.de/giftberatung.html>
Göttingen +49 551 19240 <https://www.giz-nord.de/cms/index.php>
Homburg/Saar +49 6841 19240 http://www.uniklinikumsaarland.de/de/einrichtungen/kliniken_institute/kinder_und_jugendmedizin/informations_und_behandlungszentrum_fuer_vergiftungen_des_saarlandes
Mainz +49 6131 19240 <http://www.giftinfo.uni-mainz.de/index.php?id=24807>
München +49 89 19240 <http://www.toxinfo.med.tum.de>
Greece Greek κέντρο δηλητηριάσεων +30 213 200 9000 <http://www.aglaiakyriakou.gr/>; <http://0317.syzefxis.gov.gr>
Hungary Hungarian Egészségügyi Toxikológiai Tájékoztató Szolgálat +36 6 80 20 11 99; +36 06 1 476 6464 <http://www.okbi.hu/page.php?trid=1&dz=103>
Italy Italian Bergamo +39 800 88 33 00 http://www.asst-pg23.it/section/259/Tossicologia_-_Centro_antiveleni
Firenze +39 55 794 78 19 <http://www.antiveleni.altervista.org>
Milano +39 2 661 01 029 <http://www.centroantiveleni.org>
Pavia +39 382 244 44 <http://www-3.unipv.it/reumatologia-tossicologia/cav>
Napoli +39 81 747 28 70
Foggia +39 881 732 326
Roma +39 6 685 93 726 / +39 6 499 78 000 / +39 6 305 43 43 <http://www.corso-primo-soccorso-roma.it/centri/antiveleno-lazio.html>
Ireland English Poisons information Centre of Ireland +353 1 809 21 66 <http://www.poisons.ie/Public>
Latvia Latvian Saindēšanās informācijas centri +371 670 00 610 <https://www.aslimnica.lv/lv>*
Russian Латвия +371 67000610 <https://www.aslimnica.lv/lv>
Lithuania Lithuanian Apsinuodijimų informacijos biuras + 370 5 236 20 52 <http://www.apsinuodijau.lt>
Luxembourg German Giftinformationszentrum +49 800 255 00 <http://www.poisoncentre.be>
French Centre antipoison +352 800 255 00 <http://www.centreantipoisons.be>
Netherlands Dutch 31 (0)88 755 8 <https://www.productnotificatie.nl>
Norway Norwegian Giftinformasjonen +47 22 59 13 00 <https://helsenorge.no/Giftinformasjon>
Poland Polish Kraków +48 12 411 99 99 <http://www.oit.cm.uj.edu.pl>
Gdansk +48 58 682 04 04 <http://www.pctox.pl/news.php>

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Poznań +48 61 847 69 46 http://www.raszeja.poznan.pl/oddzialy/oddzial_toksykologiczny

Warszawa +48 607 218 174 okzit@burdpi.pol.pl

Portugal Portuguese Centro de Informação Antivenenos +351 808 250 143 <http://www.inem.pt>

Romania Romanian CNMRMC +40 213 183 606 infotox@insp.gov.ro

Spitalul Clinic de Urgenta Bucuresti +40 215 992 300 int. 291
spital@urgentaflorasca.ro

Spitalul Clinic Judetean de Urgenta Targu Mures +40 265.212.111
secretariat@spitjudms.ro

Russia Russian Горячая линия Министерства здравоохранения +7 495 628 4453; +7 495 627 2944
<http://rospotrebnadzor.ru>

Serbia Serbian Nacionalni centar za kontrolu trovanja +381 11 3608 440 <http://www.vma.mod.gov.rs/sr-lat/specijalnosti/centri/nacionalni-centar-za-kontrolu-trovanja>

Slovak Rep Slovak Národné toxikologické informačné centrum +421 2 5477 4166 <http://www.ntic.sk>

Spain Spanish Servicio de Información Toxicológica +34 91 562 04 20 https://www.administraciondejusticia.gob.es/paj/pub/lico/ciudadano/informacion_institucional/organismos/instituto_nacional_de_toxicologia_y_ciencias_fo/renses/servicios/info_toxicologica/que_es_sit!/ut/p/c5/04_SB8K8xLLM9MSSzPy8xBz9CP0os3g_A1cjCydDRwMDUwNLA08nwzAvM0czA_8gM6B8pFm8mae/rqWdQsImJcaiLiYGncViYa4CHr4GBiQExugIwAEdCusNBrSwpwsLUACKPy3WuRvjlg83wy5sQ0G8C/tR-P_w88nNT9QtYMMmj0zA9IVFQH Y18l4/dl3/d3/L2dJQSEvUUt3QS9ZQnZ3LzZfTjBFMjhCMUEwMDUwOTBJQjFWSjZBNjBPTjA!/?itemId=45381

Sweden Swedish Giftinformationscentralen +46 10 456 6700 <https://giftinformation.se>

Switzerland German Giftinformationszentrum 145 <http://toxinfo.ch>

French Centre antipoison 145 <http://toxinfo.ch>

Italian Centro Antiveneni 145 <http://toxinfo.ch>

United Kingdom English NHS Helpline 111 NHS Helpline - England and Wales: <http://www.nhs.uk/NHSEngland/AboutNHSservices/Emergencyandurgentcareservices/Pages/NHS-111.aspx>

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

*** Data compared to the previous version altered.**