Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 as amended by UK REACH Regulations SI 2019/758

Issue date: 12 September 2023



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

1.1. Product identifier

Product form : Substance

Trade name : dC (Ac)-5' CE-Phosphoramidite

Product code : AMI-20C-5A-XXX

: 3'-Dimethoxytrityl)-N-acetyl-2'-deoxycytidine,5'-[(2-cyanoethyl)-(N,N-diisopropyl)]-Synonyms

Phosphoramidite

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

1.2.1. Relevant identified uses

No additional information available

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Address:

Unit 1-2 Trident Industrial Estate

Pindar Road

Hoddesdon, EN110WZ

England

1.4. Emergency telephone number

Emergency number : + 44 1 992 470757 (Monday-Friday, 8:00AM-5:00PM)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP] as amended by GB-CLP Regulation

Skin corrosion/irritation, Category 1, Sub-Category 1B H314 H318 Serious eye damage/eye irritation, Category 1 Skin sensitisation, Category 1 H317 Specific target organ toxicity - Single exposure, Category 3, Respiratory H335

tract irritation

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] as amended by GB-CLP Regulation

Hazard pictograms (CLP)



GHS05 GHS07

Signal word (CLP) : Danger

Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage.

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Precautionary statements (CLP)

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 as amended by UK REACH Regulations SI 2019/758

H317 - May cause an allergic skin reaction.

H335 - May cause respiratory irritation.

: P264 - Wash hands, forearms and face thoroughly after handling.

 ${\tt P280 - Wear \ protective \ gloves/protective \ clothing/eye \ protection/face \ protection/hearing}$

protection.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water .

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier		Classification according to Regulation (EC) No. 1272/2008 [CLP] as amended by GB-CLP Regulation
3'-Dimethoxytrityl)-N-acetyl-2'-deoxycytidine,5'-[(2-cyanoethyl)-(N,N-diisopropyl)]- Phosphoramidite	CAS-No.: Not disclosed	80 – 100	Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335

3.2. Mixtures

Not Applicable

Full text of H- and EUH-statements: see section 16

SECTION 4: First Aid measures

4.1. Description of first aid measures

First-aid measures after ingestion

First-aid measures general : If exposed or concerned, get medical attention/advice. Show this safety data sheet to the

doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an

unconscious person.

First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

Get medical attention. If breathing is difficult, supply oxygen. If breathing has stopped, give

artificial respiration.

First-aid measures after skin contact : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water

for at least 15 minutes. If irritation develops or persists, get medical attention immediately.

: IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact

First-aid measures after eye contact : IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. Get medical attention immediately. Continue rinsing.

: IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from

poison control center or medical professional. Get medical attention immediately.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects : May cause an allergic skin reaction. Causes severe skin burns and eye damage.

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 as amended by UK REACH Regulations SI 2019/758

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Causes severe skin burns. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Causes serious eye burns.

Symptoms/effects after ingestion : May cause gastrointestinal irritation. Chronic symptoms : May cause an allergic skin reaction.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Carbon dioxide. Dry powder. Water spray.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Not flammable.

Explosion hazard : Product is not explosive.

Reactivity in case of fire : None known.

Hazardous decomposition products in case of fire : No information available.

5.3. Advice for firefighters

Precautionary measures fire : Eliminate all ignition sources if safe to do so.

Firefighting instructions : Exercise caution when fighting any chemical fire. Use water spray or fog for cooling

exposed containers. Do not dispose of fire-fighting water in the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Ventilate area. Keep upwind. Spill should be handled by trained cleaning

personnel properly equipped with respiratory and eye protection.

6.1.1. For non-emergency personnel

Protective equipment : Wear Protective equipment as described in Section 8.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air

respirator, in case of emergency.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain and collect as any solid. Sweep or shovel spills into appropriate container for

disposal.

Methods for cleaning up : Wear suitable protective clothing. Take up mechanically (sweeping, shovelling) and collect

in suitable container for disposal. This material and its container must be disposed of in a

safe way, and as per local legislation.

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6.4. Reference to other sections

See Sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Keep container

closed when not in use. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before

eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Keep container closed when not in use. Store in a dry, cool and

well-ventilated place. Refrigeration required.

Incompatible materials : No data available.

Storage temperature : 2-8 °C

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

3'-Dimethoxytrityl)-N-acetyl-2'-deoxycytidine,5'-[(2-cyanoethyl)-(N,N-diisopropyl)]- Phosphoramidite			
USA - ACGIH - Occupational Exposure Limits			
Remark (ACGIH)	OELs not established		

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Ensure adequate ventilation, especially in confined areas.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Protective goggles. Protective clothing.

Personal protective equipment symbol(s):

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8.2.2.1. Eye and face protection

Eye protection:

Wear eye protection, including chemical splash goggles and a face shield when possibility exists for eye contact due to spraying liquid or airborne particles [EN 166]

8.2.2.2. Skin protection

Skin and body protection:

Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure. [EN 14605:2005 and EN 13034:2005]

Hand protection:

Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl. Suitable gloves for this specific application can be recommended by the glove supplier.

8.2.2.3. Respiratory protection

Respiratory protection:

Where vapour, mist, or dust exceed PELs or other applicable OELs, use European Standard EN 529:2005 approved dust/particulate respiratory protective equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : White-off white powder. Odour : No data available. : No data available Odour threshold : No data available Relative evaporation rate (butylacetate=1) : No data available Melting point : No data available Freezing point : No data available : No data available Boiling point Flash point : No data available Auto-ignition temperature : No data available Decomposition temperature : No data available Flammability (solid, gas) : No data available Vapour pressure : No data available Relative vapour density at 20°C : No data available Relative density : No data available Solubility : No data available Partition coefficient n-octanol/water (Log Pow) : No data available Viscosity, kinematic : Not applicable Viscosity, dynamic : No data available Explosive properties : No data available Oxidising properties : No data available Explosive limits : No data available

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9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Relative evaporation rate (Water=1) : < 1

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None under normal use.

10.4. Conditions to avoid

None under normal use.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Oxides of carbon, nitrogen and phosphorus may be formed during combustion or elevated temperature degradation.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified Acute toxicity (dermal) : Not classified Acute toxicity (inhalation) : Not classified

 Skin corrosion/irritation
 : Causes severe skin burns.

 Serious eye damage/irritation
 : Causes serious eye damage.

 Respiratory or skin sensitisation
 : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

11.2. Information on other hazards

No additional information available

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No data available. Hazardous to the aquatic environment, short–term : Not classified

(acute)

Hazardous to the aquatic environment, long-term : Not of

(chronic)

: Not classified

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other adverse effects : No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Do not discharge to public wastewater systems without permit of pollution control

authorities. No discharge to surface waters is allowed without a permit.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the

product to be released into the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

 UN-No. (ADR)
 : UN 3263

 UN-No. (IMDG)
 : UN 3263

 UN-No. (IATA)
 : UN 3263

 UN-No. (ADN)
 : UN 3263

 UN-No. (RID)
 : UN 3263

14.2. UN proper shipping name

Proper Shipping Name (ADR) : CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (contains 3'-Dimethoxytrityl)-N-acetyl-2'-

deoxycytidine,5'-[(2-cyanoethyl)-(N,N-diisopropyl)]- Phosphoramidite)

Proper Shipping Name (IMDG) : CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (contains 3'-Dimethoxytrityl)-N-acetyl-2'-

deoxycytidine,5'-[(2-cyanoethyl)-(N,N-diisopropyl)]- Phosphoramidite)

Proper Shipping Name (IATA) : Corrosive solid, basic, organic, n.o.s. (contains 3'-Dimethoxytrityl)-N-acetyl-2'-

deoxycytidine,5'-[(2-cyanoethyl)-(N,N-diisopropyl)]- Phosphoramidite)

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Proper Shipping Name (ADN) : CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (contains 3'-Dimethoxytrityl)-N-acetyl-2'deoxycytidine,5'-[(2-cyanoethyl)-(N,N-diisopropyl)]- Phosphoramidite) Proper Shipping Name (RID) : CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (contains 3'-Dimethoxytrityl)-N-acetyl-2'deoxycytidine,5'-[(2-cyanoethyl)-(N,N-diisopropyl)]- Phosphoramidite) Transport document description (ADR) : UN 3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S., 8, II, (E) Transport document description (IMDG) : UN 3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S., 8, II Transport document description (IATA) : UN 3263 Corrosive solid, basic, organic, n.o.s., 8, II Transport document description (ADN) : UN 3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S., 8, II Transport document description (RID) : UN 3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S., 8, II

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 8
Danger labels (ADR) : 8

:

IMDG

Transport hazard class(es) (IMDG) : 8
Danger labels (IMDG) : 8

:

IATA

Transport hazard class(es) (IATA) : 8
Danger labels (IATA) : 8

:

ADN

Transport hazard class(es) (ADN) : 8
Danger labels (ADN) : 8

:

RID

Transport hazard class(es) (RID) : 8
Danger labels (RID) : 8

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14.4. Packing group

Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR): C8Special provisions (ADR): 274Limited quantities (ADR): 1kgExcepted quantities (ADR): E2

Packing instructions (ADR) : P002, IBC08

Special packing provisions (ADR) : B4
Mixed packing provisions (ADR) : MP10
Portable tank and bulk container instructions (ADR) : T3
Portable tank and bulk container special provisions : TP33

(ADR)

Tank code (ADR) : SGAN, L4BN

Vehicle for tank carriage : AT
Transport category (ADR) : 2
Special provisions for carriage - Packages (ADR) : V11
Hazard identification number (Kemler No.) : 80
Orange plates :

Tunnel restriction code (ADR) : E EAC code : 2X

Transport by sea (IMDG)

Special provisions (IMDG) : 274 Limited quantities (IMDG) : 1 kg Excepted quantities (IMDG) : E2 Packing instructions (IMDG) : P002 : IBC08 IBC packing instructions (IMDG) : B21, B4 IBC special provisions (IMDG) Tank instructions (IMDG) : T3 : TP33 Tank special provisions (IMDG) : F-A EmS-No. (Fire) EmS-No. (Spillage) : S-B Stowage category (IMDG) : B

Segregation (IMDG) : SGG18, SG35

Properties and observations (IMDG) : Reacts violently with acids. Causes burns to skin, eyes and mucous membranes.

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Air transport (IATA)

PCA Excepted quantities (IATA) : E2 PCA Limited quantities (IATA) Y844 PCA limited quantity max net quantity (IATA) : 5kg PCA packing instructions (IATA) : 859 PCA max net quantity (IATA) : 15kg CAO packing instructions (IATA) : 863 CAO max net quantity (IATA) : 50kg : A3, A803 Special provisions (IATA) ERG code (IATA) : 81

Inland waterway transport

Classification code (ADN) : C8

Special provisions (ADN) : 274

Limited quantities (ADN) : 1 kg

Excepted quantities (ADN) : E2

Equipment required (ADN) : PP, EP

Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : C8

Special provisions (RID) : 274

Limited quantities (RID) : 1kg

Excepted quantities (RID) : E2

Packing instructions (RID) : P002, IBC08

Special packing provisions (RID) : B4

Mixed packing provisions (RID) : MP10

Portable tank and bulk container instructions (RID) : T3
Portable tank and bulk container special provisions : TP33

(RID)

Tank codes for RID tanks (RID) : SGAN, L4BN

Transport category (RID) : 2
Special provisions for carriage – Packages (RID) : W11
Colis express (express parcels) (RID) : CE10
Hazard identification number (RID) : 80

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. UK regulations

Contains no substance on the UK REACH List of substances subject to authorisation (Annex XIV)

Contains no substance subject to GB Export and import of hazardous chemicals - Prior Informed Consent (PIC) Regulation

15.1.2. EU regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

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15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements		
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1	Skin sensitisation, Category 1	
Skin Sens. 1B	Skin sensitisation, category 1B	
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	
H314	Causes severe skin burns and eye damage.	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H318	Causes serious eye damage.	
H335	May cause respiratory irritation.	

Abbreviations and acronyms		
ACGIH	American Conference of Government Industrial Hygienists	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
CAS-No.	Chemical Abstract Service number	
DNEL	Derived-No Effect Level	
EC50	Median effective concentration	
EC-No.	European Community number	
ED	Endocrine disrupting properties	
EN	European Standard	
GB-CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008, as amended by (EU Exit) Regulations 2019 No. 720 and amendments	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LD50	Median lethal dose	
OEL	Occupational Exposure Limit	
OSHA	Occupational Safety and Health Administration	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006	

Safety Data Sheet

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Abbreviations and acronyms		
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STOT	Specific target organ toxicity	
vPvB	Very Persistent and Very Bioaccumulative	

Data sources : Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

Classification for the USA in accordance with 29 CFR 1910.1200 (2012).

Classification for the EU in accordance with Regulation (EC) No 1272/2008 of the European

Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and

1999/45/EC, and amending Regulation (EC) No 1907/2006.

Classification for GB according to UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations

2019 No. 720 and amendments.

ECHA (European Chemicals Agency).

Training advice : Normal use of this product shall imply use in accordance with the instructions for use and

corresponding product packaging.

Indication of changes:

Version 1.0: New SDS Created

Other information : Author: SS

SDS Prepared for LGC by:
Pace Analytical Services, Inc.
Product Regulatory Services Group
1800 Elm Street
Minneapolis, MN 55414
United States
612-656-1175
paceSDS@pacelabs.com

Classification according to Regulation (EC) No. 1272/2008 as amended by GB-CLP Regulation	Classification procedure
Skin Corr. 1B	Weight of evidence
Eye Dam. 1	Weight of evidence
Skin Sens. 1	Weight of evidence
STOT SE 3	Weight of evidence

LGC EU SDS

This information is disclosed to the best of LGC's knowledge. Disposal should be in accordance with applicable regional, national and local laws and regulations.