



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
OSHA HCS2012

Revision date 21-May-2026

Revision Number 1

1. Identification

Product identifier

Product Name 5-Formyl-2'-deoxycytidine

Other means of identification

Substance Name
Product Code(s) PY7589

PR No

| Product Code(s) | Product description |
|-----------------|--|
| PY7589-B005 | 5-Formyl-2'-deoxycytidine, 5 mg, Glass Screw-Top |
| PY7589 | 5-Formyl-2'-deoxycytidine |

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use For research use only.

Restrictions on use Not to be used for human or animal consumption.

Details of the supplier of the safety data sheet

Supplier Address

LGC Genomics Ltd.
3 Mallard Way, Strathclyde Business Park
Bellshill ML4 3BF
UK
Tel: +44 (0) 1698 849911 (between 9am-5pm GMT)

E-mail genomics.sdsrequest@lgcgroup.com

Emergency telephone number

Emergency Telephone

For Hazardous Materials or Dangerous Goods Incidents, Spills, Leaks, Fires, or Exposures, Call CHEMTREC: +17035273887

2. Hazard(s) identification



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Classification

Classified according to OSHA.

| | |
|--|-------------|
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 2A |
| Specific target organ toxicity (single exposure) | Category 3 |
| Category 3 Target organ effects: Respiratory irritation. | |

Hazards not otherwise classified (HNOC)

Not applicable

Label elements



Warning

Hazard statements

Classified according to OSHA.
Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Avoid breathing dust, fume, gas, mist, vapors and spray
Use only outdoors or in a well-ventilated area
Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection

Precautionary Statements - Response

Specific treatment (see supplemental first aid instructions on this label)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
IF ON SKIN: Wash with plenty of water and soap
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash it before reuse
IF INHALED: Remove person to fresh air and keep comfortable for breathing
Call a POISON CENTER or doctor if you feel unwell

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed
Store locked up



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Precautionary Statements - Disposal

Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable

Hazards classified under paragraph (d)(1)(ii) of 1910.1200

No information available.

Other information

No information available.

3. Composition/information on ingredients

Substance

Formula C10H13N3O5

| Chemical name | CAS No. | Weight-% | Trade secret |
|---------------------------|-------------|----------|--------------|
| 5-Formyl-2'-deoxycytidine | 137017-45-9 | 100 | - |

4. First-aid measures

Description of first aid measures

| | |
|---|---|
| General advice | Show this safety data sheet to the doctor in attendance. |
| Inhalation | Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if symptoms occur. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists. |
| Skin contact | Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists. |
| Ingestion | Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician. |
| Self-protection of the first aider | Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8). |

Most important symptoms and effects, both acute and delayed

| | |
|----------------------------|--|
| Symptoms | Erythema (skin redness). May cause redness and tearing of the eyes. Burning sensation. |
| Effects of Exposure | No information available. |



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Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

| | |
|---|--|
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Large Fire | CAUTION: Use of water spray when fighting fire may be inefficient. |
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
| Specific hazards arising from the chemical | No information available. |
| Hazardous combustion products | No information available. |
| Explosion data | |
| Sensitivity to mechanical impact | None. |
| Sensitivity to static discharge | None. |
| Special protective equipment and precautions for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protective equipment. |

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

| | |
|-----------------------------|--|
| Personal precautions | Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing. |
| Other information | Refer to protective measures listed in Sections 7 and 8. |

Methods and material for containment and cleaning up

| | |
|--|--|
| Methods for containment | Prevent further leakage or spillage if safe to do so. |
| Methods for cleaning up | Pick up and transfer to properly labeled containers. |
| Prevention of secondary hazards | Clean contaminated objects and areas thoroughly observing environmental regulations. |

7. Handling and storage



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Precautions for safe handling

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Ensure adequate ventilation. Avoid breathing vapors or mists. In case of insufficient ventilation, wear suitable respiratory equipment.

General hygiene considerations

Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Please refer to the manufacturer's certificate for specific storage and transport temperature conditions. Store only in the original receptacle unless other advice is given on the CoA.

8. Exposure controls/personal protection

Control Parameters

Exposure Limits

This product, as supplied, contains materials that do not have reportable occupational exposure limits or are not subject to the reporting requirements of the local jurisdiction.

Biological occupational exposure limits

This product, as supplied, contains materials that do not have reportable biological exposure limits or are not subject to the reporting requirements of the local jurisdiction.

Appropriate engineering controls

Engineering controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection

Avoid contact with eyes. Wear safety glasses with side shields (or goggles).

Hand protection

Wear suitable gloves. The protective gloves to be used must comply with the specifications of OSHA (29 CFR 1910.132). Wear protective nitrile or butyl gloves.

Skin and body protection

Long sleeved clothing. Wear suitable protective clothing.

Respiratory protection

Appropriate respiratory protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction.

Environmental exposure controls

Do not allow into any sewer, on the ground or into any body of water.



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9. Physical and chemical properties

Information on basic physical and chemical properties

| | |
|--------------------------------|--------------------------|
| Appearance | Solid |
| Physical state | Solid |
| Color | White |
| Odor (includes odor threshold) | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|---|-------------------|-------------------------|
| Melting point / freezing point | No data available | None known |
| Boiling point (or initial boiling point or boiling range) | No data available | None known |
| Flammability | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Flash point | No data available | None known |
| Autoignition temperature | No data available | None known |
| Decomposition temperature | No data available | None known |
| SADT (°C) | No data available | None known |
| pH | No data available | None known |
| pH (as aqueous solution) | No data available | None known |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | No data available | None known |
| Solubility | No data available | None known |
| Water solubility | No data available | None known |
| Partition coefficient n-octanol/water (log value) | No data available | None known |
| Vapor pressure (includes evaporation rate) | No data available | None known |
| Evaporation rate | No data available | None known |
| Density and/or relative density | No data available | None known |
| Bulk density | No data available | |
| Liquid Density | No data available | |
| Relative vapor density | No data available | None known |
| Particle characteristics | | None known |
| Particle Size | No data available | |
| Particle Size Distribution | No data available | |

Other information

| | |
|-------------------|------------|
| Molecular formula | C10H13N3O5 |
| Molecular weight | 255.03 |

Information with regard to physical hazard classes

10. Stability and reactivity

| | |
|------------|---------------------------|
| Reactivity | No information available. |
|------------|---------------------------|



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| | |
|---|--|
| Chemical stability | Stable under normal conditions. |
| Possibility of hazardous reactions | None under normal processing. |
| Hazardous polymerization | No information available. |
| Conditions to avoid | None known based on information supplied. |
| Incompatible materials | Strong acids. Strong bases. Strong oxidizing agents. |
| Hazardous decomposition products | None known based on information supplied. |

11. Toxicological information

Information on likely routes of exposure

Product Information

| | |
|---------------------|---|
| Inhalation | Specific test data for the substance or mixture is not available. |
| Eye contact | Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain. |
| Skin contact | Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components). |
| Ingestion | Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. |

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity
No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Classification based on data available for ingredients. Causes skin irritation.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.



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| | |
|--|---|
| Respiratory or skin sensitization | Based on available data, the classification criteria are not met. |
| 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 | May cause respiratory irritation. |
| 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. |
| Other adverse effects | No information available. |
| Interactive effects | No information available. |

12. Ecological information

| | |
|---|---------------------------|
| <u>Ecotoxicity</u> | No information available. |
| <u>Persistence and degradability</u> | No information available. |
| <u>Bioaccumulative potential</u> | No information available. |
| <u>Mobility in soil</u> | No information available. |
| <u>Other adverse effects</u> | No information available. |



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13. Disposal considerations

Disposal methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging

Do not reuse empty containers.

14. Transport information

DOT

Not regulated

15. Regulatory information

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA

LGC has not confirmed that the chemical substances in this product are on the TSCA Inventory, and LGC is distributing this product solely for use either in applications statutorily exempt from TSCA and regulated under other laws (e.g., FFDC, FIFRA) or in research and development activities in accordance with the TSCA Inventory R&D exemption provided at 40 CFR 720.36. It is the end-user's responsibility to understand and follow the requirements that apply to its use of this product.

| Chemical name | CAS No. | Inventory Listing Status | Commercial Activity Designation |
|---------------------------|-------------|--------------------------|---------------------------------|
| 5-Formyl-2'-deoxycytidine | 137017-45-9 | - | Unknown * |

DSL/NDSL
EINECS/ELINCS
ENCS

Contact supplier for inventory compliance status.
Contact supplier for inventory compliance status.
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| | |
|--------------|---|
| IECSC | Contact supplier for inventory compliance status. |
| KECL | Contact supplier for inventory compliance status. |
| PICCS | Contact supplier for inventory compliance status. |
| AIIIC | Contact supplier for inventory compliance status. |
| NZIoC | Contact supplier for inventory compliance status. |
| TCSI | Contact supplier for inventory compliance status. |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing Chemicals Inventory
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals
TCSI - Taiwan Chemical Substance Inventory

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CAA (Clean Air Act)

This product does not contain any substances regulated as pollutants pursuant to Clean Air Act (CAA).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable



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16. Other information

NFPA Health hazards 2 Flammability 0 Instability 0 Special hazards -
HMIS Health hazards 2 Flammability 0 Physical hazards 0 Personal protection -

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

| | |
|---------|---|
| ACGIH | American Conference of Governmental Industrial Hygienists |
| ADN | Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Europe) |
| ADR | Agreement concerning the International Carriage of Dangerous Goods by Road (Europe) |
| AIIC | Australian Inventory of Industrial Chemicals |
| ATE | Acute Toxicity Estimate |
| ASTM | American Society for the Testing of Materials |
| bar | Biological Reference Values for Chemical Compounds in the Work Area |
| BAT | Biological tolerance values for occupational exposure |
| BEL | Biological exposure limits |
| bw | Body weight |
| Ceiling | Maximum limit value |
| CMR | Carcinogen, Mutagen or Reproductive Toxicant |
| DOT | Department of Transportation (United States) |
| DSL | Domestic Substances List (Canada) |
| EmS | Emergency Schedule |
| ENCS | Existing and New Chemical Substances (Japan) |
| EPA | U.S. Environmental Protection Agency |
| GHS | Globally Harmonized System |
| HMIS | Hazardous Materials Identification System |
| IARC | International Agency for Research on Cancer |
| IATA | International Air Transport Association |
| IBC | International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk |
| ICAO | International Civil Aviation Organization |
| IECSC | Inventory of Existing Chemical Substances in China |
| IMDG | International Maritime Dangerous Goods |
| IMO | International Maritime Organization |
| ISO | International Organization for Standardization |
| KECI | Korean Existing Chemicals Inventory |
| LC50 | Lethal Concentration to 50% of a test population |
| LD50 | Lethal Dose to 50% of a test population (Median Lethal Dose) |
| MARPOL | International Convention for the Prevention of Pollution from Ships |
| NFPA | National Fire Protection Association |
| NIOSH | National Institute for Occupational Safety and Health |
| n.o.s. | Not Otherwise Specified |
| NOAEC | No Observed Adverse Effect Concentration |
| NOAEL | No Observed Adverse Effect Level |
| NOELR | No Observable Effect Loading Rate |



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| | |
|---------|---|
| NTP | National Toxicology Program (United States) |
| NZIoC | New Zealand Inventory of Chemicals |
| OECD | Organization for Economic Cooperation and Development |
| OEL | Occupational exposure limits |
| OSHA | Occupational Safety and Health Administration of the US Department of Labor |
| PBT | Persistent, Bioaccumulative and Toxic substance |
| PICCS | Philippines Inventory of Chemicals and Chemical Substances |
| PMT | Persistent, Mobile and Toxic |
| PPE | Personal protective equipment |
| QSAR | Quantitative Structure Activity Relationship |
| RID | Agreement concerning the International Carriage of Dangerous Goods by Rail (Europe) |
| SADT | Self-Accelerating Decomposition Temperature |
| SAR | Structure-activity relationship |
| SARA | Superfund Amendments and Reauthorization Act |
| SDS | Safety Data Sheet |
| SL | Surface Limit |
| STEL | Short Term Exposure Limit |
| STOT RE | Specific target organ toxicity - Repeated exposure |
| STOT SE | Specific target organ toxicity - Single exposure |
| TCSI | Taiwan Chemical Substance Inventory |
| TDG | Transport of Dangerous Goods (Canada) |
| TSCA | Toxic Substances Control Act (United States) |
| TWA | Time-Weighted Average |
| UN | United Nations |
| VOC | Volatile organic compounds |
| vPvB | Very Persistent and Very Bioaccumulative |
| vPvM | Very Persistent and Very Mobile |
| Sen+ | Sensitizer |
| Sk* | Skin designation |
| ** | Hazard Designation |

Key literature references and sources for data used to compile the SDS

U.S. Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
U.S. Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)



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International Organization for Economic Co-operation and Development (OECD) Environment, Health, and Safety Publications
International Organization for Economic Co-operation and Development (OECD) High Production Volume Chemicals Program
International Organization for Economic Co-operation and Development (OECD) Screening Information Data Set
United Nations World Health Organization (WHO)

Revision date 21-May-2026
Revision Note No information available.

Disclaimer

The information in this safety data sheet (SDS) has been prepared with due care and is true and accurate to the best of our knowledge. The user must determine the suitability of the information for its particular purpose, ensure compliance with existing laws and regulations, and be aware that other or additional safety or performance considerations may arise when using, handling and/ or storing the material. The information in this SDS does not purport to be all inclusive or a guarantee as to the properties of the material supplied, and should be used only as a guide. LGC makes no warranties or representations as to the accuracy and completeness of the information contained herein, shall not be held responsible for the suitability of this information for the user's intended purposes or the consequences of such use, and shall not be liable for any damage or loss, howsoever arising, direct or otherwise.

End of Safety Data Sheet