

BERRY & ASSOCIATES/ICON ISOTOPES

Safety Data Sheet 1-(α)-Chloro-3,5-di-O-p-toluoyl-2-deoxy-D-ribose

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

1.1 Product identifier

Product name	1-(α)-Chloro-3,5-di-O-p-toluoyl-2-deoxy-D-ribose
Product number	CR 2020
Brand	Berry&Associates
Substance name	5-O-Benzoyl-1,2-di-O-acetyl-3-deoxy-D-ribose
CAS no.	4330-21-6

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

Laboratory chemicals; Manufacture of substance

1.3 Details of the supplier of the safety data sheet

Name	Berry & Associates/ICON Isotopes
Address	2434 Bishop Circle East Dexter, MI 48130 USA
Telephone	734-426-3787
Fax	734-426-9077
email	alchem@berryassoc.com

1.4 Emergency telephone number

USA /Canada 800-424-9300
All else 703-527-3887

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

- Skin corrosion/irritation (chapter 3.2), Cat. 2, H315
- Eye damage/irritation (chapter 3.3), Cat. 2, H319
- Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3, H335,H336

For the full text corresponding to the "H"-codes displayed in this section, refer to Section 2.2.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]

Hazard pictograms



Safety Data Sheet

1-(α)-Chloro-3,5-di-O-p-toluoyl-2-deoxy-D-ribose

Signal word

Warning

Hazard statement(s)

H315

H319

H335

H336

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation

May cause drowsiness or dizziness

Precautionary statement(s)

P264

P280

P302+P352

P321

P332+P313

P362+P364

P305+P351+P338

P337+P313

P261

P271

P304+P340

P312

P403+P233

P405

P501

Wash hands thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN: Wash with plenty of water.

Specific treatment (see Section 4).

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

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.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Use only outdoors or in a well-ventilated area.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor if you feel unwell.

Store in a well ventilated place. Keep container tightly closed.

Store locked up.

Dispose of contents/container to as described in Section 13.

SECTION 3: Composition/information on ingredients

3.1 Substances

Substance name

5-O-Benzoyl-1,2-di-O-acetyl-3-deoxy-D-ribose

CAS no.

4330-21-6

Formula

C₂₁H₂₁O₅Cl

Molecular weight

388.85

Other names / synonyms

1-(α)-Chloro-3,5-di-O-p-toluoyl-2-deoxy-D-ribose

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Consult a physician. Show this safety data sheet to the doctor in attendance.
Move out of dangerous area.

Following inhalation

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Following skin contact

Wash skin with soap and water. Consult a physician if symptoms occur.

Following eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Following ingestion

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Safety Data Sheet

1-(α)-Chloro-3,5-di-O-p-toluoyl-2-deoxy-D-ribose

SECTION 5: Firefighting measures

5.1 Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Solid water stream may be inefficient.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen chloride gas

5.3 Advice for firefighters

Wear self-contained breathing apparatus if necessary and full protective gear to prevent contact with skin and eyes.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions

Take measures to avoid release into the environment, do not let product enter drains.

6.3 Methods and material for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal. Transfer to chemical waste container in accordance with local regulations.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.
Recommended storage temperature: -20 °C

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Use industrial hygiene practices to control hazardous materials.

Personal protection equipment

Eye and face protection

Safety glasses

Safety Data Sheet

1-(α)-Chloro-3,5-di-O-p-toluoyl-2-deoxy-D-ribose

Skin protection

Chemical-resistant gloves

Body protection

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

Respiratory protection

NIOSH approved respirator, as conditions warrant.

Environmental exposure controls

Do not let material enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Solid
Odour	No data available.
Odour threshold	No data available.
pH	No data available.
Melting point / freezing point	No data available.
Initial boiling point and boiling range	No data available.
Flash point	No data available.
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Upper/lower flammability limits	No data available.
Upper/lower explosive limits	No data available.
Vapour pressure	No data available.
Vapour density	No data available.
Relative density	No data available.
Solubilit(ies)	Soluble in CH ₂ Cl ₂ ,
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.
Explosive properties	No data available.
Oxidising properties	No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

No data available.

Safety Data Sheet

1-(α)-Chloro-3,5-di-O-p-toluoyl-2-deoxy-D-ribose

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products

No data available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

No data available.

Skin corrosion/irritation

No data available.

Serious eye damage/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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

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 identified as a carcinogen or known carcinogen by OSHA.

Reproductive toxicity

No data available.

Summary of evaluation of the CMR properties

No data available.

STOT-single exposure

No data available.

STOT-repeated exposure

Inhalation - May cause respiratory irritation.

Aspiration hazard

No data available.

Additional information

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Safety Data Sheet

1-(α)-Chloro-3,5-di-O-p-toluoyl-2-deoxy-D-ribose

SECTION 12: Ecological information

12.1 Toxicity

No data available.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal of the product

Dispose in accordance with local, state and federal regulations.

Disposal of contaminated packaging

Dispose in accordance with local, state and federal regulations.

SECTION 14: Transport information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

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

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 311/312 Hazards

No SARA hazards.

SARA 313 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act

Safety Data Sheet

1-(α)-Chloro-3,5-di-O-p-toluoyl-2-deoxy-D-ribose

Pennsylvania Right To Know Components

2-Deoxydi(p-toluoyl)- α -D-erythro-pentofuranosyl chloride

CAS-No. 4330-21-6

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: Other information

Full text of hazard statements referenced in Section 2

H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness

Further information/disclaimer

The Information in this Safety Data Sheet is correct to the best of our knowledge and belief at the date of its publication but we cannot accept liability for any loss, injury or damage which may result from its use.

The information given in the Safety Data Sheet is designed only as guidance for safe handling, storage and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment. Users should make independent decisions regarding completeness of information based on all sources available. Berry & Associates, Inc. shall not be held liable for any damage resulting from handling or contact with the above product.