

**BERRY & ASSOCIATES/ICON ISOTOPES**  
**Safety Data Sheet**  
**2,3,5-Tri-O-benzoyl- $\beta$ -D-ribofuranosyl cyanide**

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

**1.1 Product identifier**

Product name	2,3,5-Tri-O-benzoyl- $\beta$ -D-ribofuranosyl cyanide
Product number	CR 2090
Brand	Berry&Associates
Substance name	2,3,5-Tri-O-benzoyl- $\beta$ -D-ribofuranosyl cyanide
CAS no.	23316-67-8

**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
email	alchem@berryassoc.com

**1.4 Emergency telephone number**

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

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**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

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

- Acute toxicity, oral (chapter 3.1), Cat. 4, H302
- Acute toxicity, inhalation (chapter 3.1), Cat. 4, H332
- Acute toxicity, dermal (chapter 3.1), Cat. 4, H312

For the full text corresponding to the "H"-codes displayed in this section, refer to Section 16.

**2.2 Label elements**

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

**Hazard pictograms**



# Safety Data Sheet

## 2,3,5-Tri-O-benzoyl-β-D-ribofuranosyl cyanide

### Signal word

### Warning

#### Hazard statement(s)

H302  
H332  
H312

Harmful if swallowed  
Harmful if inhaled  
Harmful in contact with skin

#### Precautionary statement(s)

P264  
P270  
P301+P312  
P330  
P501  
P261  
P271  
P304+P340  
P312  
P280  
P302+P352  
P321  
P362+P364

Wash hands thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell, Rinse mouth.  
Dispose of contents/container as described in Section 13.  
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.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF ON SKIN: Wash with plenty of water/...  
Specific treatment (see Section 4 on this label).  
Take off contaminated clothing and wash it before reuse.

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## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Substance name	2,3,5-Tri-O-benzoyl-β-D-ribofuranosyl cyanide
CAS no.	23316-67-8
Formula	C <sub>27</sub> H <sub>21</sub> NO <sub>7</sub>
Molecular weight	471.48
Other names / synonyms	2,3,5-Tri-O-benzoyl-β-D-ribofuranosyl cyanide

#### Hazardous components

##### 1. 2,3,5-Tri-O-benzoyl-β-D-ribofuranosyl cyanide

Concentration	95 - 100 %
CAS no.	23316-67-8

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## 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 off with soap and plenty of water. Consult a physician.
Following eye contact	Flush eyes with water as a precaution. Get medical attention if symptoms occur.

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Following ingestion

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

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NO<sub>x</sub>)

### 5.3 Advice for firefighters

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

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## 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. Avoid breathing dust.

### 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.

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## 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. Normal measures for preventive fire protection.

For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed and in a dry, well-ventilated cool area.

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## 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

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### Skin protection

Chemical-resistant gloves

### Body protection

Complete suit protecting against chemicals, 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.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance	White 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 water, MeOH and EtOH
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.

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## 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.

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#### 10.5 Incompatible materials

No data available.

#### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NO<sub>x</sub>)

Other decomposition products - No data available

In the event of fire: see section 5

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## 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

No data available.

#### Aspiration hazard

No data available.

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### 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

No data available.

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### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

##### Disposal of the product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

##### Disposal of contaminated packaging

Dispose in accordance with local, state and federal regulations.

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### SECTION 14: Transport information

#### DOT (US)

Not dangerous goods

#### IMDG

Not dangerous goods

#### IATA

Not dangerous goods

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### 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

Acute health hazard

##### SARA 313 Components

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

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#### 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.

#### New Jersey Right To Know Components

2,3,5-Tri-O-benzoyl- $\beta$ -D-ribofuranosyl cyanide CAS-No. 23316-67-8

#### Pennsylvania Right To Know Components

2,3,5-Tri-O-benzoyl- $\beta$ -D-ribofuranosyl cyanide CAS-No. 23316-67-8

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## SECTION 16: Other information

#### Full text of hazard statements referenced in Section 2

H302	Harmful if swallowed
H312	Harmful in contact with skin
H332	Harmful if inhaled

#### 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.