N-Formyl Leurosine (Vincristine Impurity G): sc-212210

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: N-Formyl Leurosine (Vincristine Impurity G)
Product Number: sc-212210

Supplier: Santa Cruz Biotechnology, Inc.
2145 Delaware Avenue
Santa Cruz, CA 95060
800.457.3801 or 831.457.3800

Emergency: ChemWatch
Within the US & Canada: 877-715-9305
Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

2. HAZARDS IDENTIFICATION

WHMIS Symbols (Canada)

D2A Very Toxic Material Causing Other Toxic Effects
Reproductive Toxin/Teratogen

Classification of the Substance or Mixture and Label Elements
GHS Hazards Classification (According to EU Regulation 1272/2008 and US OSHA 1910.1200)
Acute Toxicity, Oral (Category 4)
Reproductive Toxicity (Category 1A)
EU Classification (According to EU Regulation 67/548/EEC)
Harmful if swallowed. May impair fertility. May cause harm to the unborn child.
EU Risk and Safety Statements (According to EU Regulation 67/548/EEC)

Hazard Statements	Hazard Codes
Toxic	T

Risk Codes and Phrases

R22	Harmful if swallowed.
R60	May impair fertility.
R61	May cause harm to the unborn child.

Safety Precaution Codes and Phrases

S53	Avoid exposure - obtain special instruction before use.
S51	Use only in well-ventilated areas.

GHS Hazards Identification (According to EU Regulation 1272/2008 and US OSHA 1910.1200)
Signal Word Danger

GHS Hazard Statements

H302	Harmful if swallowed.
H360	May damage fertility or the unborn child.

GHS Precautionary Statements

P201	Obtain special instructions before use.
P281	Use personal protective equipment as required.
P301/P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Unclassified Hazards/Hazards Not Otherwise Classified

No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Molecular Formula:	C46H54N4O10
CAS Registry #:	54022-49-0
Molecular Weight:	822.94
Synonyms:	(3'!,4'!)-4'-Deoxy-3',4'-epoxy-22-oxovincaleukoblastine; 22-Oxoleurosine; F-Leurosine; Formylleurosine; Leuroformine; N-Demethyl-N-formylleurosine; N-Formyl N-demethylleurosine; NSC 269419; Vinformide; Vincristine Impurity G

4. FIRST AID MEASURES

Description of First Aid Measures General Advice

If medical attention is required, show this safety data sheet to the doctor.

If Inhaled

If inhaled, move casualty to fresh air. If not breathing, give artificial respiration and consult a physician.

In Case of Skin Contact

Wash affected area with soap and water. Consult a physician if any exposure symptoms are observed.

In Case of Eye Contact

Immediately rinse eyes with plenty of water for at least 15 minutes. Consult a physician.

If Swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Do NOT induce vomiting unless advised to do so by a physician or Poison Control Center. Seek medical attention.

Most Important Symptoms and Effects, Both Acute and Delayed

Nausea,vomiting, headache, low blood pressure.

Indication of any Immediate Medical Attention and Special Treatment Needed

No data available

5. FIREFIGHTING MEASURES

Extinguishing Media Suitable Extinguishing Media

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

Special Hazards Arising from the Substance or Mixture

Carbon oxides, Nitrogen oxides

Advice for Firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Further Information

No data available

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Use recommended personal protective equipment (see Section 8). Prevent the formation of dusts and mists. Adequate ventilation must be provided to ensure dusts or mists are not inhaled.

Environmental Precautions

Material should not be allowed to enter the environment. Prevent further spillage or discharge into drains, if safe to do so.

Methods and Materials for Containment and Cleaning Up

Contain the spill and then collect using non-combustible absorbent material (such as clay, diatomaceous earth, vermiculite or other appropriate material). Place material in a suitable, sealable container and then dispose according to local/national regulations and guidance (see Section 13). For protective equipment, refer to Section 8. For disposal, see Section 13.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid contact with skin and eyes. Ventilation and proper handling are to be used to prevent the formation of dusts and mists. Normal measures for preventative fire protection. No smoking, eating or drinking around this material. Wash hands after use.

Conditions for Safe Storage, Including any Incompatibilities

Ensure container is kept securely closed before and after use. Keep in a well ventilated area and do not store with strong oxidizers or other incompatible materials (see Section 10).

Store at -20°C under inert atmosphere. Hygroscopic/moisture sensitive.

Specific End Uses

For scientific research and development only. Not for use in humans or animals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Contains no components with established occupational exposure levels.

Exposure Controls Appropriate Engineering Controls

A laboratory fumehood or other appropriate form of local exhaust ventilation should be used to avoid exposure.

Personal Protective Equipment

All recommendations below are advisory in nature and a risk assessment should be performed by the employer/ end user prior to use of this product. The type of protective equipment must be selected based on the amount and concentration of the dangerous material being used in the workplace.

Eye/Face Protection

Safety goggles or face shield. All equipment should have been tested and approved under appropriate standards, such as NIOSH (US), CSA (Canada), or EN 166 (EU).

Skin Protection

Gloves should be used when handling this material. Gloves are to be inspected prior to use. Contaminated gloves are to be removed using proper glove removal technique so that the outer surface of the glove does not contact bare skin. Dispose of contaminated gloves after use in compliance with good laboratory practices and local requirements.Gloves used for incidental exposures (splash protection) should be designated as “chemical resistant” by EU standard EN 374 with the resistance codes corresponding to the anticipated use of the material. Unrated gloves are not recommended. Gloves used for prolonged direct exposure (immersion) should be designated “chemical resistant” as per EN 734 with the resistance codes corresponding to the anticipated use of the material. These recommendations may not apply if the material is mixed with any other chemical, or dissolved into a solution. A risk assessment must be performed to ensure the gloves will still offer acceptable protection.

Body Protection

Fire resistant coveralls or chemical-resistant bodysuit.

Respiratory Protection

Recommended respirators are NIOSH-approved N100 or CEN-approved FFP3 particulate respirators. These are to be only used as a backup to local exhaust ventilation or other engineering controls. If the respirator is the only means of protection, a full-face supplied air respirator must be used.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	solid	pH	no data available
Boiling point	no data available	Flash point	no data available
Ignition temperature	no data available	Lower explosion limit	no data available
Vapor pressure	no data available	Upper explosion limit	no data available
Density	no data available	Freezing point	no data available
Relative vapor density	no data available	Odor	no data available
Odor Threshold	no data available	Evaporation rate	no data available
Auto-ignition temperature	no data available	Partition coefficient	no data available
Melting point	200-210°C	n-octanol/water	
Solubility	Chloroform, Methanol		

10. STABILITY AND REACTIVITY

Reactivity
No data available
Chemical Stability
Stable under recommended storage conditions.
Possibility of Hazardous Reactions
No data available
Conditions to Avoid
No data available
Incompatible Materials
Strong oxidizing agents.
Hazardous Decomposition Products
No data available

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects
Acute Toxicity
LD50 (intraperitoneal) 28.8 mg/kg
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
No data available
Reproductive Toxicity/Teratogenicity
Probable human reproductive toxin/teratogen. Several laboratory studies have shown structurally related compounds exhibit strong reproductive toxicity/teratogenicity in animal models. This effect may be extrapolated to have similar effects in humans.
Single Target Organ Toxicity - Single Exposure
No data available
Single Target Organ Toxicity - Repeated Exposure
No data available
Aspiration Hazard
No data available
Potential Health Effects and Routes of Exposure

- **Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.
- **Ingestion** Harmful if swallowed.
- **Skin** May be harmful if absorbed through skin. May cause skin irritation.
- **Eyes** May cause eye irritation.

Signs and Symptoms of Exposure
Nausea,vomiting, headache, low blood pressure. To the best of our knowledge, the chemical, physical, and toxicological properties of this material have not been thoroughly investigated.
Additional Information
RTECS: LR2962000

12. ECOLOGICAL INFORMATION

Toxicity
no data available
Bioaccumulative potential
no data available
PBT and vPvB assessment
no data available
Persistence and degradability
no data available
Mobility in soil
no data available
Other adverse effects
no data available

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Product Product may be burned in an incinerator equipped with afterburner and scrubber. Excess and expired materials are to be offered to a licensed hazardous material disposal company. Ensure that all Federal and Local regulations regarding
the disposal and destruction of this material are followed.

Contaminated Packaging

Dispose of as above.

Other Considerations

Product is not to be disposed of in sanitary sewers, storm sewers, or landfills.

14. TRANSPORT INFORMATION

DOT (US)	IMDG	IATA
Not dangerous goods	Not dangerous goods	Not dangerous goods

15. REGULATORY INFORMATION

This safety data sheet complies with the requirements of WHMIS (Canada), OSHA 1910.1200 (US), and EU Regulation
EC No. 1907/2006 (European Union).

Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Canada

DSL/NDSL Status: This product is not listed on the Canadian DSL/NDSL.

United States

TSCA Status: This product is not listed on the US EPA TSCA.

European Union

ECHA Status: This product is not registered with the EU ECHA.

Chemical Safety Assessment

No data available

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

10/10/2013