Discovery Fine Chemicals Limited
Unit 4 A , Old Forge Road, Ferndown Ind.Estate
Wimborne , Dorset. BH21 7RR .United Kingdom

Tel: +44 (0)1202 874517 Fax +44 (0)845 094 4385
Email: pjc@discofinechem.com
Web: www.discofinechem.com

Registered in England No. 5971945
VAT No GB 896 9965 19

MATERIAL SAFETY DATA SHEET

20-Deoxo-23-deoxy-5-O-[3,6-dideoxy-3-(dimethylamino)-β-D-glucopyranosyl]-20,23-di-1-piperidinyltylonolide

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: Tildipirosin Date: 17th April 215 Version: Discofinechem2

Company: Discovery Fine Chemicals Ltd
Unit 4A Old Forge Road Ferndown Ind Estate
Wimborne Dorset BH21 7RR
United Kingdom

Telephone: +44 (0)1202 874517
Fax: +44 (0)845 0944 385
E-mail: info@discofinechem.com

2. HAZARDS IDENTIFICATION

Chemical Name Tildipirosin

To be used only for scientific research and development. Not for **Product Uses** use in humans or animals.

WHMIS Classification (Canada)

D2A Very Toxic Material Causing Other Toxic Effects
Skin/Respiratory Tract Sensitizer

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

EU Risk and Safety Statements (According to EU Regulation 67/548/EEC)

Risk Codes and Phrases

R42/43 May cause sensitization by inhalation and skin contact.

Hazard Statements

Harmful

Hazard Codes

Xn

Safety Precaution Codes and Phrases

S22 Do not breathe dust.
S37/39 Wear suitable gloves and eye/face protection.
S51 Use only in well-ventilated areas

2.1/2.2 Classification of the Substance or Mixture and Label Elements

GHS Hazards Classification (According to EU Regulation 1272/2008 and US OSHA 1910.1200)

Sensitisation, Respiratory (Category 1)
Sensitisation, Skin (Category 1)

EU Classification (According to EU Regulation 67/548/EEC)

May cause sensitization by inhalation and skin contact

Signal Word Danger

GHS Hazard Statements

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P342/P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P333/P313 If skin irritation or rash occurs: Get medical advice/attention.

2.3 Unclassified Hazards/Hazards Not Otherwise Classified - No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

20-Deoxo-23-deoxy-5-O-[3,6-dideoxy-3-(dimethylamino)-β-D-glucopyranosyl]-20,23-di-1-piperidinyltylonolide;

Synonyms
C41H71N3O8 734.02 Cas No: 328898-40-4
3.2 Mixtures - Not a mixture
4. 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
4.1 Description of First Aid Measures
4.2 Most Important Symptoms and Effects, Both Acute and Delayed - No data available
4.3 Indication of any Immediate Medical Attention and Special Treatment Needed - No data available
5. FIREFIGHTING MEASURES
5.1 Extinguishing Media
5.2 Special Hazards Arising from the Substance or Mixture - Carbon oxides, Nitrogen oxides
Suitable Extinguishing Media - Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
5.3 Advice for Firefighters - Wear self contained breathing apparatus for fire fighting if necessary.
5.4 Further Information - No data available
6. ACCIDENTAL RELEASE MEASURES
6.1 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.
6.2 Environmental Precautions - Material should not be allowed to enter the environment. Prevent further spillage or discharge into drains, if safe to do so.
6.3 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
7.1 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.
7.2 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). Storage conditions: -20°C Freeze
7.3 Specific End Uses
For scientific research and development only. Not for use in humans or animals.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION
8.1 Control Parameters - contains no substances that have an occupational exposure value
8.2 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 glasses or safety goggles. 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 “low chemical resistant” or “waterproof” by EU standard EN 374. Unrated gloves are not recommended. Suggested gloves: AnsellPro nitrile gloves style 92-500 or 92-600, 5 mil thickness. Penetration time has not been determined. 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. Suggested gloves: AnsellPro Viton/Butyl gloves style 38-612, 4/8 mil thickness. Penetration time has not been determined.
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 (Nomex) lab coat or coveralls.

Respiratory Protection - Recommended respirators are NIOSH-approved N95 or CEN-approved FFP2 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

9.1 Information on basic physical and chemical properties

a) Appearance Form: crystalline, Colour: yellow
b) Odour - no data available
c) Odour Threshold - no data available
d) pH - no data available
e) Melting point/freezing point - Melting point/range: 115 - 120 °C
f) Initial boiling point and boiling range - no data available
g) Flash point - no data available
h) Evaporation rate - no data available
i) Flammability (solid, gas) - no data available
j) Upper/lower flammability or explosive limits - no data available
k) Vapour pressure - no data available
l) Vapour density - no data available
m) Relative density - no data available
n) Water solubility - no data available
o) Partition coefficient: noctanol/water - no data available
p) Autoignition temperature - no data available
q) Decomposition temperature - no data available
r) Viscosity - no data available
s) Explosive properties - no data available
t) Oxidizing properties - no data available

9.2 Other safety information - no data available

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
10.5 Incompatible Materials Strong oxidizing agents.
10.6 Hazardous Decomposition Products No data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

A) Acute Toxicity - No data available
B) Skin Corrosion/Irritation - No data available
C) Serious Eye Damage/Irritation - No data available
D) Respiratory or Skin Sensitization - May cause an allergic skin reaction. Inhalation may cause difficulty breathing and asthma-like symptoms.
E) Germ Cell Mutagenicity - No data available
F) Carcinogenicity - No data available
G) Reproductive Toxicity/Teratogenicity - No data available
H) Single Target Organ Toxicity - Single Exposure - No data available
I) Single Target Organ Toxicity - Repeated Exposure - No data available
J) Aspiration Hazard - No data available
K) Potential Health Effects and Routes of Exposure
Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion: May be harmful if swallowed.
Skin: May be harmful if absorbed through skin. May cause skin irritation.
Eyes: May cause eye irritation.
L) Signs and Symptoms of Exposure: To the best of our knowledge, the chemical, physical, and toxicological properties of this material have not been thoroughly investigated.
M) Additional Information - RTECS: not listed

12. ECOLOGICAL INFORMATION

12.1 Toxicity - No data available
12.2 Persistance 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
12.6 Other Adverse Effects - No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

A) 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.

B) Contaminated Packaging - Dispose of as above.

C) Other Considerations - Product is not to be disposed of in sanitary sewers, storm sewers, or landfills.

14. TRANSPORT INFORMATION

14.1 UN Number

DOT (US): N/A IATA: N/A IMDG: N/A ADR/RID: N/A

14.2 UN Proper Shipping Name

DOT (US)/IATA:
IMDG/ARD/RID:
not dangerous goods
not dangerous goods

14.3 Transport Hazard Class(es)

DOT (US): N/A IATA: N/A IMDG:N/A ADR/RID: N/A

14.4 Packing Group

DOT (US): N/A IATA: N/A IMDG:N/A ADR/RID: N/A

14.5 Environmental Hazards

DOT (US): None IATA: None IMDG:None ADR/RID: None

14.6 Special Precautions for User

None

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).

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

A) Canada This product is not listed on the Canadian DSL/NDSL

B) United States This product is not listed on the US EPA TSCA.

C) European Union This product is not registered with the EU ECHA.

TSCA Status:

DSL/NDSL Status:

ECHA Status:

15.2 Chemical Safety Assessment - No data available

16. OTHER INFORMATION

16.1 Revision History

16.2 List of Abbreviations

LD50 Median lethal dose of a substance required to kill 50% of a test population.
LC50 Medial lethal concentration of a substance required to kill 50% of a test population.
LDLo Lowest known lethal dose
TDLo Lowest known toxic dose
IARC International Agency for Research on Cancer
NTP National Toxicology Program
RTECS Registry of Toxic Effects of Chemical Substances
Text of H-code(s) and R-phrase(s) mentioned in Section 2
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
R42/43 May cause sensitization by inhalation and skin contact.

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product.