## **Material Safety Data Sheet**

Section 1: Chemical Product Company Identification			
Product Name	Umeclidinium Bromide Impurity 1		
CAS No.	461648-39-5		
Identified uses	Pharmaceutical Reference Standard		
Details of the Supplier Company	SynZeal Research Pvt Ltd Plot No. F, Ganesh Industrial Estate 423/24/8, MahagujaratInd Estate Sarkhej-Bavla Road, Ahmedabad-382 213. Gujarat, India.		
Telephone	+91-7969225400		

Section 2: Chemical Information		
Chemical Name	Diphenyl(quinuclidin-4-yl)methanol	
CAS No.	461648-39-5	
Molecular Weight	293.4	
Molecular Formula	C20H23NO	

Section 3: Hazards Identification			
Emergency Overview:			
Appearance White Solid			
Target Organs	NA		
Potential Health Effects:			
Eye	NIL		
Skin	NIL		
Ingestion	NIL		
Inhalation	NIL		
Chronic	NIL		

Section 4: First Aid Measures	
Eye	Wash with plenty of water
Skin	Wash with plenty of water

Ingestion	Medical assistance for gastric lavage.		
Inhalation	Remove to fresh air, artificial respiration or oxygen if necessary.		
Notes to Physician	Umeclidinium Bromide Impurity 1 can be washed with plenty of water in case of any exposure		
Section 5: Firefighting Measures			
Extinguishing Media	Carbon dioxide, dry chemical powder, foam, water.		
Unusual Fire and Explosion Hazards	None indicated		
Section 6: Accidental Release Measures			
Personal Precautions	Wear self-contained breathing apparatus, avoid dust formation.		
Spills/Leaks	Wash with plenty of water, provide adequate ventilation.		
Section 7: Handlings and Storage			
Handling	Wear surgical gloves		
Storage	Can be stored at room temperature		
Section 8: Exposure Controls, Personal Protection			
Respiratory Protection	Self-contained breathing apparatus		
Exposure Limits	NA		
Eye Protection	Wear safety goggles		
Other Protective Equipment	Protective clothing		
Skin	Full sleeves apron		
Clothing	Cotton		
Section 9: Physical and Chemical Properties			
Appearance	White Solid		
Odor	Odor less		
Melting Point	NA		
рН	Basic		
Vapor Pressure	NA		
Vapor Density	NA		
Evaporation Rate	NA		
Viscosity	NA		

Boiling Point	NA	
Decomposition Temp	NA	
Auto ignition Temp.	NA	
Flash Point	NA	
NFPA Rating	NA	
<b>Explosion Limits</b>		
Lower	NA	
Upper	NA	
Solubility	Chloroform, Methanol	
Specific Gravity/Density	NA	

Section 10: Stability and Reactivity		
Chemical Stability Stable		
Conditions to avoid	Direct contract to skin	
Incompatibilities with other Materials	Keep away	
Hazardous Decomposition Products	NIL	
Hazardous Polymerization	NIL	

Section 11: Toxicological Information		
CAS	NA	
LD50/LC50	NA	
Carcinogenicity	NIL	
Epidemiology	NIL	
Teratogenicity	NIL	
Reproductive Effects	NIL	
Neurotoxicity	NIL	
Mutagencity	NIL	
Other Studies	NA	

Section 12: Ecological Information	
Data not available	

RCRA P-Series	Can be incinerated
RCRA U-Series	NA

Section 14: Transport Consideration

**UN-Number** 

ADR/RID: IMDG: IATA:

UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

Transport hazard class(es)

ADR/RID: IMDG: IATA:

**Packaging Group** 

ADR/RID: IMDG: IATA:

**Environmental hazards** 

ADR/RID: No IMDG Marine pollutant: No IATA: No

Special precautions for users

**Further information** 

Section	15:	Regulatory	v Inforn	nation
Jection	<b>±</b> J.	regulator	y 1111011	nation

TSCA	Attached the letter
Health and Safety Reporting List	No data available
Chemical Test Rules	Chemical analysis report is attached

## Section 16: Additional Information

 $This \ product \ is \ not \ bioactive, \ non-radio active. \ It \ is \ for \ R/D \ use \ only. \ Not \ for \ drug, \ household \ or \ other \ uses.$ 

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. It does not represent any guarantee of the product.