

## Material Safety Data Sheet

### Section 1: Chemical Product Company Identification

Product Name	1-Chlorobutane
CAS Number	109-69-3
Identified Uses	Pharmaceutical Reference Standard
Details of the Supplier Company	Naarini MolBio Pharma Private Limited 308, Yash Arian, Swami Vivekanand Circle, Memnagar, Ahmedabad, India - 380052.
Contact Number	+91 9824257789

### Section 2: Chemical Information

Chemical Name	Butyl Chloride
CAS Number	109-69-3
Molecular Weight	92.57
Molecular Formula	C <sub>4</sub> H <sub>9</sub> Cl

### Section 3: Hazard Identification

<b>Emergency Overview:</b>	
Appearance	Clear Colourless Oil
Target Organs	N/A
<b>Potential Health Effects:</b>	
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	Apalutamide IHRS can be washed with plenty of water in case of any exposure

### Section 5: Fire Fighting Measures

Extinguishing Media	Carbon Dioxide, dry chemical powder, foam, water.
Unusual Fire & 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: Handling & 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	Wear Protective Clothing
Skin	Full Sleeves Apron
Clothing	Cotton

### Section 9: Physical & Chemical Properties

Appearance	Clear Colourless Oil
Odour	Pungent
Melting Point	-123°C
pH	NA
Vapour Pressure	10.7kPa/20°C
Vapour Density	3.2
Evaporation Rate	NA
Viscosity	NA
Boiling Point	78°C
Decomposition Temperature	NA
Auto Ignition Temperature	240°C
Flash Point	-13°C
NFPA Rating	NA
<b>Explosion Limits:</b>	
Lower	NA
Upper	NA
Solubility	Chloroform, Methanol
Specific Gravity/Density	NA

### Section 10: Stability & Reactivity

Chemical Stability	Stable
Conditions to avoid	Direct Contact With Skin
Incompatibilities w.r.to Other Materials	Keep Away
Hazardous Decomposition Products	NIL
Hazardous Polymerization	NIL

### Section 11: Toxicological Information

CAS	NA
LD50/LC50	NA
Carcinogenicity	NA
Epidemiology	NA
Teratogenicity	NA
Reproductive Effects	NA

Neurotoxicity	NA
Mutagenicity	NA
Other Studies	NA

### Section 12: Ecological Information

No Data Available

### Section 13: Disposal Consideration

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

### Section 14: Transportation Consideration

<b>Un Number:</b>	
Transport Hazard Class(es):	
ADR/RID	3: Flammable liquid
IMDG	3: Flammable liquid
IATA	3: Flammable liquid
Environmental Hazard(s)	
ADR/RID	II
IMDG	II
IATA	II

### Section 15: Transportation Consideration

TSCA	No Data Available
Health & Safety Reporting List	No Data Available
Chemical Test Rules	Chemical Analysis Report Is Attached Herewith

### Section 16: Additional Information

This product is NOT bioactive, non-radioactive. 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 present state of our knowledge. It does not represent any guarantee of the product. The burden of safe use of this material rests entirely with the user. Naarini MolBio Pharma Private Limited disclaims all liability for any damage resulting from use of this material.