# Material Safety Data Sheet

#### **Effective Date:**

#### Due Date:

Section 1 : Chemical Product Company Identification	
Product Name	Melphalan D-Isomer
CAT No.	КММ063007
CAS No.	4213-32-5
Identified uses	Pharmaceutical Reference Standard
Details of the Supplier Company	K. M. PHARMA SOLUTION PRIVATE LIMITED Unit No.101, Shivam Industrial park, Sarkhej-bavala NH=8A, At-Moraiya, Changodar, Ahmedabad (Gujarat), India-382213
Telephone	+91 9898822121

Section 2 : Chemical Infor	mation
Chemical Name	4-[Bis(2-chloroethyl)amino]-D-phenylalanine hydrochloride
CAS No.	4213-32-5
Molecular Weight	305.2 : 36.5
Molecular Formula	C13H18Cl2N2O2 : HCl

Section 3 : Hazards Identification		
Emergency Overview:	2	
Appearance	NA	
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	Melphalan D-Isomer 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	~Storage
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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
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Section 9 : Physical and Chemical Properties	
Appearance	NA
Odor	NA
Melting Point	NA
рН	NA



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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	
NFPA Rating NA   Explosion Limits NA   Lower NA   Upper NA		
Lower	NA	
Upper	NA	
Solubility	NA	
Specific Gravity/Density	NA	

# Section 10 : Stability and Reactivity

Chemical Stability	~ChemicalStability
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	>10,000 mg/kg Remarks: Behavioral:Somnolence (general depressed activity)
Carcinogenicity	NIL
Epidemiology	NIL
Teratogenicity	NIL
Reproductive Effects	NIL
Neurotoxicity	NIL
Mutagencity	NIL



NA

# Section 12 : Ecological Information

Data not available

### Section 13 : Disposal Consideration

RCRA P-Series RCRA U-Series

Can be incinerated

NA

### Section 14 : Transport Consideration

UN-Number			
ADR/RID: IMDG:	IATA:		
UN proper shipping	g name		
ADR/RID: Not danger IMDG: Not dangerous IATA: Not dangerous	goods		
Transport hazard c	lass(es)	044	
ADR/RID: IMDG:	IATA:		
Packaging Group			
ADR/RID: IMDG:	IATA:		
Environmental haz	ards		
ADR/RID: No IMDG Marine pollutar IATA: No	nt: No		
Special precautions for users			
Further information	n		
	<b>N</b> Y		

Section 15 : Regulatory Information			
TSCA	Attached the letter		
Health & Safety Reporting List	No data available		
Chemical Test Rules	Chemical analysis report is attached		

## 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 the present state of our knowledge. It does not represent any guarantee of the product.

K.M. Phanna Solution Private Limited

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