

Rev Date:	Junio-2024	<b>SAFETY DATA SHEET (SDS)</b> According to the Regulation (EC) No 1907/2006 (REACH)
Rev Review:	Junio-2026	
Version:	3.0 / ENG.	
Revisado por Jefe Operaciones	Ing. Hugo Pérez	
Líne:	Curative	Product: <b>Moca</b>

## SECTION 1: SUBSTANCE / MIXTURE AND COMPANY IDENTIFICATION

### 1. PRODUCT IDENTIFICATION

Product:	MOCA
Chemical Name:	(4,4 (-methylene-bis (2-chloroaniline)))
Synonyms:	Imucure 133
Product Line:	Curative
Formula:	C <sub>13</sub> H <sub>12</sub> Cl <sub>2</sub> N <sub>2</sub>
Molecular weight:	267.15 g/mol
CAS No:	101-14-4

### 1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Use of the substance/mixture: Curing agent for polyurethane elastomers and cast polyurethanes, Curing agent for epoxy resin or epoxy urethane resin.

### 1.3 DATA OF THE SUPPLIER OF THE SAFETY DATA SHEET:

Importer/Distributor:

Polylubex, S.A de C.V  
Av. Chalma S/N, Col. Jardines de la Hacienda Sur, CP: 54720, Cuautitlán  
Izcalli, Edo de México, México  
Tel: (55) 2472-0070

### 1.4 EMERGENCY TELEPHONE

SETIQ: 01 800 00214 00 (Province)  
5559-1588 (DF)  
ANIQ: (55) 5230-5100

## SECTION 2: HAZARD IDENTIFICATION

### 2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

#### Classification (REGULATION (EC) No 1272/2008)

Acute Toxicity by Ingestion (Category 4)	H302
Carcinogenicity (Category 1B)	H350
Acute aquatic toxicity (Category 1)	H400

For the full text of the H-Statements mentioned in this section, see Section 1.

### 2.2 LABEL ELEMENTS





Labeling (REGULATION (EC) No 1272/2008)

*Danger pictograms*

**Polylubex**

Especialidades Químicas de Excelencia

*Word of caution:*

Danger

**Indications of danger:** H302 ... Harmful if swallowed.  
H350 ... May cause cancer by inhalation.  
H400 ... Very toxic to aquatic organisms

**Cautionary advice:** Prevention  
P201 Obtain instructions before use  
P273 Avoid release to the environment.  
Intervention:  
P308 + P313 IF exposed or concerned: seek medical advice/attention.  
Elimination:  
P501 Dispose of contents/container in a wastewater treatment plant.  
authorized waste disposal.

### 2.3 OTHER HAZARDS

Prolonged or repeated skin contact may cause dermatitis. Prolonged or repeated exposure may cause cancer.  
Prolonged or repeated exposure may cause irreversible damage to health.

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

### 3.1 SUBSTANCE

Chemical name	Concentration	CAS No.	EC No.	Ranking (REGULATION (EC) No 1272/2008)
(4,4 (-methylene-bis (2-chloroaniline))	99.5 - 100 %	101-14-4	202-918-9	Acute Tox. 4; Carc. 1B; Aquatic Acute 1; Aquatic Chronic 1; H302, H350, H400

### 3.2 MIXTURES

No information available.

## SECTION 4: FIRST AID MEASURES

### 4.1 DESCRIPTION OF FIRST AID MEASURES

**After inhalation:** Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Seek medical attention.

**After skin contact:** Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. Wash clothing before reuse.

**After eye contact:** Rinse eyes immediately with water; remove contact lenses, if present, after the first 5 minutes, then continue rinsing for at least 15 minutes. Seek medical attention without delay, preferably from an ophthalmologist.

**After ingestion:** If swallowed, DO NOT induce vomiting. Seek medical attention immediately. Do not give anything by mouth. Wash out mouth with water (do not swallow).

### 4.2 MAIN SYMPTOMS AND EFFECTS, ACUTE AND DELAYED.

Symptoms  
Effects: No information available.

### 4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED.

Treatment: No information available.

## SECTION 5: FIRE PROTECTION MEASURES.

### 5.1 EXTINGUISHING MEDIA

Suitable extinguishing media: SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Unsuitable extinguishing media: No information available.

### 5.2 SPECIFIC HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Combustible material: nitrogen oxides, carbon oxides, hydrogen cyanide.

### 5.3 TIPS FOR FIREFIGHTERS

Special protective equipment for firefighting personnel: Firefighters should wear self-contained breathing apparatus and full fire protection equipment (bunker gear). Keep personnel away and upwind. Water should be used to keep fire-exposed containers cool.

Other information: No information available.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES.

Wear appropriate personal protective equipment as outlined in Section 8.

### 6.2 ENVIRONMENTAL PRECAUTIONS

Prevent further leaks or spills. Prevent entry into sewers or drains. If product enters sewers or drains, pump into a covered, ventilated container; the lid should be placed loosely on the container, but should not be tightened under pressure. Move to a well-ventilated area. Emergency services may need to be called to assist in the clean-up operation.

### 6.3 CONTAINMENT AND CLEANUP METHODS AND MATERIALS

Adequate supplies of decontaminant should always be kept available. Contain and cover spill with decontaminant, moist soil or wet sand and allow to react for at least 30 minutes. Shovel residue into open top drums and remove for further decontamination if necessary. Wash area thoroughly with water and inspect. Test the atmosphere for vapors to ensure safe working conditions before other personnel are allowed in the area.

### 6.4 REFERENCE TO OTHER SECTIONS

For layout see section 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1 PRECAUTIONS FOR SAFE HANDLING

Tips for safe handling: Wear appropriate personal protective equipment as outlined in Section 8.

Indications for fire and explosion protection: Avoid contact of this product with water at all times during handling and storage. Avoid the formation of dust and aerosols. Adequate extraction must be provided in places where dust is formed.

Hygiene measures: Avoid contact with eyes and skin.

**7.2 SAFE STORAGE CONDITIONS, INCLUDING POSSIBLE INCOMPATIBILITIES.**

Technical requirements for warehouses and containers: Store in a cool, dry and well-ventilated place. Do not store in open containers. Store away from heat and sources of ignition. Store away from incompatible materials.

**7.3 SPECIFIC END USES**

Specific uses: Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

**SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

**8.1 CONTROL PARAMETERS**

**Componentes con valores límite ambientales de exposición profesional.**

Componente	No. CAS	Valor	Parámetros de control	Base
4,4'-Methylene bis(2-chloroaniline)	101-14-4	TWA	0.01 ppm	Valores límite (TLV) de la ACGIH,USA
	Observaciones	Metahemoglobinemia Cáncer de vejiga Las sustancias para las que existe un Índice de Exposición Biológica o índices (véase la sección BEI ®) Cancerígenos con sospecha de serlo en el humano Riesgo de absorción cutánea		
		TWA	0.010000 ppm	Valores límite (TLV) de la ACGIH,USA
		Metahemoglobinemia Cáncer de vejiga Las sustancias para las que existe un Índice de Exposición Biológica o índices (véase la sección BEI ®) Cancerígenos con sospecha de serlo en el humano Riesgo de absorción cutánea		
		TWA	0.02 ppm 0.22 mg/m3	OSHA - Tabla Z-1 Límites para los contaminantes del aire - 1910.1000, EE.UU.
		Notación 'Piel'		
		TWA	0.003000 mg/m3	Límites de exposición recomendados de NIOSH, EE.UU.
		Carcinógeno ocupacional potencial Véase el Apéndice A Potencial para la absorción cutánea		
		TWA	0.003 mg/m3	Límites de exposición recomendados de NIOSH, EE.UU.
		Carcinógeno ocupacional potencial Véase el Apéndice A Potencial para la absorción cutánea		

### Límites biológicos de exposición profesional

Componente	No. CAS	Parámetros	Valor	Muestras biológicas	Base
4,4'-Methylene bis(2-chloroaniline)	101-14-4	MBOCA total		Orina	ACGIH - Índices Biológicos de Exposición (BEI)
	Observaciones	Al final del turno (Tan pronto como sea posible después de que cese la exposición)			
		MBOCA total		Orina	ACGIH - Índices Biológicos de Exposición (BEI)
		Al final del turno (Tan pronto como sea posible después de que cese la exposición)			

## 8.2 EXPOSURE CONTROLS

Engineering provisions:	Use adequate general or local exhaust ventilation to maintain airborne levels at acceptable levels.
Eye protection:	Wear approved chemical goggles or face shield to protect eyes.
Hand protection:	Wear chemical resistant gloves to avoid skin contact with this product. Examples of preferred barrier materials for gloves include: butyl rubber, chlorinated polyethylene, polyethylene or ethylene vinyl alcohol laminate (EVAL). Examples of acceptable barrier materials for gloves include: natural rubber (latex), neoprene, nitrile/butadiene rubber (nitrile or NBR), polyvinyl chloride (PVC or vinyl) or viton.
Skin and skin protection Body and hands:	Wear coveralls, boots, apron and gloves to avoid skin contact with this product. Permeation test data indicate that the following are effective protective clothing materials: butyl rubber, neoprene, nitrile/butadiene.
Respiratory protection:	Atmospheric levels should be kept below the exposure standard. When atmospheric levels may exceed the exposure standard, wear an approved air-purifying respirator equipped with an organic vapor sorbent and particulate filter.
Environmental exposure controls:	Prevent further leakage or spillage if it can be done safely. Do not allow product to enter sewage system. Discharge into the environment should be avoided.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES.

### 9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Physical condition	solid scale
Color	White / pale yellow.
Odor	Some odor.
Olfactory threshold	No data available
pH	No data available
Melting point:	98°C-104°C
Boiling point/boiling range:	202-214°C
Flash point:	> 230°C
Evaporation rate:	No data available
Flammability (solid, gas):	No data available
Explosion limit, lower:	No data available
Explosion limit, upper:	No data available
Vapor pressure:	No data available
Density:	1.44 g / cm <sup>3</sup> (24°C)
Relative vapor density:	No data available
Relative density:	N / A (Water = 1)
Vapor pressure:	3.7 × 10 <sup>-6</sup> mm Hg (20 ° C)
Solubility in water:	Insoluble in water

Soluble in acetone, toluene and ethyl alcohol.

Decomposition temperature:

No data available

Dynamic viscosity:

No data available

## 9.2 OTHER INFORMATION

No information available.

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 REACTIVITY

No information available.

### 10.2 CHEMICAL STABILITY

Stable under normal conditions of use.

### 10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No information available.

### 10.4 CONDITIONS TO AVOID

Heat, flames, ignition sources and incompatibles

### 10.5 INCOMPATIBLE MATERIALS

Strong alkalis, acids, nitrates and oxidizing agents

### 10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NO<sub>x</sub>), gaseous hydrogen chloride.

Other decomposition products - no data available.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

#### **Toxicity to animals:**

*LD50 (oral, rat) = 1140 mg/kg*

*LD50 (oral, mouse) = 640 mg/kg*

*LD50 (oral, guinea pigs) = 400 mg / kg*

*LD50 (skin, rabbit) > 5 g / kg*

*LD50 (subcutaneous, rat) > 5 g / kg*

*LD50 (intraperitoneal, mouse) = 64 mg/kg*

#### **Skin irritation:**

*No information available.*

#### **Eye irritation:**

*No information available.*

**Sensitization Sensitization test:**

No information available.

**Genotoxicity in vitro**

No information available.

**Carcinogenicity**

The product is probably carcinogenic to humans. It may cause genetic damage in humans. The product caused lung, liver, breast and bladder cancer in mice, rats and dogs, and is expected to be a human carcinogen by NTP. The product causes eye and skin irritation. The 4-hour inhalation (rat) is estimated to be greater than 20 mg/l.

**Specific target organ toxicity - single exposure**

No information available.

**Specific target organ toxicity - repeated exposures**

No information available.

**Aspiration hazard**

No information available.

**SECTION 12: ECOLOGICAL INFORMATION**

**12.1 TOXICITY**

This substance is very toxic to aquatic organisms.

This substance may cause long-term adverse effects in the aquatic environment. This substance may cause long-term adverse effects in the environment.

**12.2 PERSISTENCE AND DEGRADABILITY**

No data available.

**12.3 BIOACCUMULATION POTENTIAL**

No data available.

**12.4 MOBILITY ON THE GROUND**

No data available.

**12.5 RESULTS OF PBT AND VPVB ASSESSMENT**

PBT/vPvB assessment is not available as chemical safety assessment is not required/not performed.

**12.6 OTHER ADVERSE EFFECTS**

Very toxic to aquatic organisms, with long lasting harmful effects.

An environmental hazard cannot be excluded in case of unprofessional handling or disposal.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 WASTE TREATMENT METHODS**

**Product**

Chemical waste generators must determine if a discarded chemical is classified as a hazardous waste. U.S. EPA guidelines for determining classification are listed in 40 CFR parts 261.3. In addition, waste generators should consult state and local hazardous waste regulations to ensure complete and accurate classification.

**Contaminated containers**

Dispose in accordance with federal, state, provincial and local regulations.

**SECTION 14: TRANSPORTATION INFORMATION**

	<b>Ground Transportation (US DOT)</b>	<b>Maritime Transport (IMDG)</b>	<b>Air Transport (ICAO-TI / IATA-DGR)</b>
<b>14.1 UN No.</b>	3077	3077	3077
<b>14.2 UN proper shipping name</b>	Solid substance dangerous for the environment, n.o.s. (4,4'-Methylene bis(2-chloroaniline))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (4,4'-Methylene bis(2-chloroaniline))	Environmentally hazardous substance, solid, n.o.s. (4,4'-Methylene bis(2-chloroaniline))
<b>14.3 Transport hazard class(es)</b>	9	9	9
<b>14.4 Packing group</b>	III	III	III
<b>14.5 hazards</b>	NO	YES	NO

**14.7 BULK TRANSPORT ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE**

Not applicable

**SECTION 15: REGULATORY INFORMATION**

**15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS / LEGISLATION SPECIFIC TO THE SUBSTANCE OR MIXTURE**

SARA 302 Components

This material does not contain chemicals subject to the reporting requirements of SARA Title III, section 302.

SARA 313 Components

The following components are subject to the reference levels established by SARA Title III, Section 313:

4,4'-Methylene bis(2-chloroaniline) 101-14-4 1993-04-24

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

4,4'-Methylene bis(2-chloroaniline)

CAS No. 101-14-4

Revision Date: 1993-04-24

Pennsylvania Right To Know Components

4,4'-Methylene bis(2-chloroaniline)

CAS No. 101-14-4

Revision Date: 1993-04-24

New Jersey Right To Know Components

4,4'-Methylene bis(2-chloroaniline)

CAS No. 101-14-4

Revision Date: 1993-04-24

California Prop. 65 Components

WARNING! This product contains a chemical

known in the state of California to cause cancer.  
4,4'-Methylene bis(2-chloroaniline)  
CAS No. 101-14-4  
Revision Date: 1992-11-09

## 15.2 CHEMICAL SAFETY ASSESSMENT

No data available.

## SECTION 16: OTHER INFORMATION

### 16.1 INDICATION OF CHANGES

No data available.

### 16.2 ABBREVIATIONS AND ACRONYMS

Acute Tox. Acute Toxicity  
Aquatic Chronic Chronic aquatic toxicity  
Carc. Carcinogenicity

### 16.3 KEY BIBLIOGRAPHIC REFERENCES AND DATA SOURCES

An explanation of the abbreviations and acronyms used in the safety data sheet  
Abbreviations and acronyms can be found at [www.wikipedia.org](http://www.wikipedia.org).

### 16.4 CLASSIFICATION FOR MIXTURES AND EVALUATION METHOD USED ACCORDING TO REGULATION (EC) 1207/2008 [CLP].

No data available.

### 16.5 RELEVANT R, H AND EUH PHRASES (NUMBER AND FULL TEXT)

H302 Harmful if swallowed.  
H350 May cause cancer.  
H400 Very toxic to aquatic organisms.

### 16.6 FORMATIVE COUNSELING

The data provided in this safety data sheet are based on our present knowledge. They describe only the safety precautions for handling this product and do not represent a guarantee for the described properties of the product.

DEPARTMENT. TECHNICAL SERVICE  
Filiberto Hernández Vásquez  
Technical Specialist