


Safety Data Sheet (SDS)

Effective Date Mar 13, 2019
Date last revised -

Section 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	MabXpure suspended in ethanol aqueous solution	
Product Code	CPI-AR-MXP-01	
Reference Number	cpi4232-1	
Company Name (Japan)	DAICEL CORPORATION	
Address	JR SHINAGAWA EAST BLDG. 2-18-1, Konan, Minato-ku, Tokyo 180-8230, Japan	
Company Contact	Marketing & Development (CPI Company)	
Phone Number	+81-3-6711-8221	
Fax Number	+81-3-6711-8228	
Company Name (U.S.A.)	CHIRAL TECHNOLOGIES, INC.	
Address	800 North Five Points Road, West Chester, PA 19380, U.S.A.	
Phone Number	+1-610-594-2100	
Fax Number	+1-610-594-2325	
Company Name (France)	CHIRAL TECHNOLOGIES EUROPE S.A.S.	
Address	Parc d'Innovation - 160, Bd Gonthier d'Andernach - CS 80140, 67404 Illkirch Cedex, France	
Phone Number	+33 3 88 79 52 00	
Fax Number	+33 3 88 66 71 66	
Company Name (China)	DAICEL CHIRAL TECHNOLOGIES (CHINA) CO., LTD.	
Address	3F, No.32. HeXiang Rd, WaiGaoQiao Pilot Free trade zone, Shanghai, 200131, China	
Phone Number	+86-21-5046-0086	
Fax Number	+86-21-5046-2321	
Company Name (India)	DAICEL CHIRAL TECHNOLOGIES (INDIA) PVT. LTD	
Address	Lab No. 4A, Phase III, IKP Knowledge Park Genome Valley, Turkapally, Shameerpet, Ranga Reddy Dist. Hyderabad-500 078, Telangana, India	
Phone Number	+91-40-2338-3700	
Fax Number	+91-40-2348-0104	
Recommended Use and Restriction on Use	Purification of biomolecules (For research and industrial use)	

Section 2 – HAZARDS IDENTIFICATION

GHS Classification	Classification of the substance	Flammable liquids – Category 3
Hazard statements		H226: Flammable liquid and vapor
Label elements	Hazard pictograms	
Precautionary statements	<p>P210: Keep away from heat, hot surfaces, open flames, sparks.</p> <p>P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.</p>	

Section 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name or Generic Name	Concentration or Its Ranges	Formula	CAS RN
Modified silica gel	15~23%		Not available
Ethanol	15~20%	CH ₃ CH ₂ OH	64-17-5
Water	57~70%	H ₂ O	7732-18-5

*Ethanol is used as a preservative.

Impurities and/or Stabilizing Additives which Contribute to the Classification	No information available
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Section 4 – FIRST AID MEASURES

Inhalation	<p>Move affected person to the open air. Keep him or her at rest to allow easier breathing.</p> <p>Call a doctor.</p>
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Skin Contact

Wash the skin immediately.
If skin irritation or rash occurs: Get medical advice and attention.

Eye Contact

If it reaches the eyes: Irrigate eyes immediately and continue to do at least 15 minutes with copious amounts of water.
Call a doctor.

Ingestion

Call a doctor.

Section 5 – FIRE FIGHTING MEASURES**Extinguishing Media**

Dry chemicals, carbon dioxide, and water sprinkling

Specific Hazards

May burn but will not ignite easily.
Burns if heated intensely.

Specific Fire Fighting

Use water extinguishers, dry chemical fire extinguishers, carbon dioxide fire extinguishers if extinguish a fire at an early stage.

Protection of Fire Fighter

Wear protective clothes, self contained breathing apparatus, oxygen rebreather, rubber boots, latex gloves, and goggles or full face shield.

Section 6 – ACCIDENTAL RELEASE MEASURES**Personal Precautions,
Protective Equipment and
Emergency Procedures**

Wear appropriate personal protective equipment (Refer to "Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION") and avoid inhalation or contact with eyes and skin.

Environmental Precautions

Isolate the site as a leak area by providing a zone that has an appropriate width to all directions.

**Decontamination/Absorption/
Soaking/Vacuuming/Neutralization**

Do not touch the leakage, and do not walk on it.

Prevent release to environment if possible.

In case of small quantity of dry spill put the spilled material in a clean and dry container with a clean shovel, and cover the container loosely. Then remove it from the spill location.

Collect the leakage by scraping up and put it into an empty container that can be closed tightly. Dispose of it later.

**Methods and Equipment for
Containment and Cleaning up**

If possible, first secure container to stop leakage.

**Prevention Measures for
Secondary Accidents**

Remove all ignition sources promptly. (Prohibition of smoking, sparks, and flames in the surrounding area)

Isolate flammables (such as wood, paper, and oil) from the leakage.

Section 7 – HANDLING AND STORAGE**Handling****Technical Measures**

Provide ventilation system and Use necessary personal protective equipment as described in "8. EXPOSURE CONTROLS AND PERSONAL PROTECTION."

Local and General Ventilation

Provide local ventilations and a full ventilation system as described in "8. EXPOSURE CONTROLS AND PERSONAL PROTECTION."

Precautions for Safe Handling

Do not handle until all safety precautions have been read and understood.

Handle at a well-ventilated place.

Avoid release to the environment.

Do not let it contact eyes and the skin, or the clothes.

Ventilate the exhaust to keep the concentration in the air below the exposure limit.

Get the manual before use.

Use properly by reading "Precautions for Use" labeled on the container before use or disposal.

Wash hands thoroughly after handling.

Prohibit the use of heat, sparks, and fire in the surrounding area.

Do not touch, inhale, or swallow.

Use at the cool place where can maintain the appropriate temperature.

Do not breathe dust and fume.

Do not handle containers roughly such as rolling or dragging around.

**Prevent Handling of
Incompatible Substances or
Mixtures**

Refer to "10. STABILITY AND REACTIVITY"

Storage Precautionary Statements	Incompatible Substances or Mixtures	Refer to "10. STABILITY AND REACTIVITY"
	Storage Conditions	Store away from incompatible materials. Keep containers away from direct sunlight and heat. Store in a well-ventilated and cool place keeping container tightly closed.
	Material Used in Packaging/Containers	Packaging materials and containers are not legislated, but use sturdy and closed-type containers.

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls		If dust is generated, install a local ventilation equipment. Take preventive measures for electrostatic discharge. A workplace to store or handle this substance should be provided with an eye washing station and an emergency shower station.
Personal Protective Equipment	Respiratory Protection	If dust is generated, wear a NIOSH or EN approved respirator for respiratory organs.
	Hand Protection	Wear adequate personal protective gloves.
	Eye Protection Skin and Body Protection	Goggles (ANSI approved) Wear the adequate personal protective clothing and face protection equipment.
Specific Hygiene Measures		Wash hands thoroughly after handling.

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Physical State	liquid (viscous)
	Color	NA
	Odor	NA
	pH	NA
Initial Boiling Point and Boiling Ranges		NA
Flash Point		NA
Auto-Ignition Temperature		NA
Specific Gravity (Density)		NA
Dust Explosive Lower Limit		NA
Decomposition Temperature		NA
<as Ethanol>		
Initial Boiling Point and Boiling Ranges		78.3°C
Flash Point		14°C
Flammability or Explosive Lower Limit		3.3%
Flammability or Explosive Higher Limit		19%
Vapor Pressure		57.3hPa (19.6°C)
Specific Gravity (Density)		0.7864g/cm ³ (25°C)
Solubility		1.00 × 10 ⁶ mg/L (in Water)
Partition Coefficient : n-Octanol/Water		log Kow=-0.31 (25°C)
Auto-Ignition Temperature		363°C

Section 10 – STABILITY AND REACTIVITY

Stability	No data available
Possibility of Hazardous Reaction	No data available
Conditions to Avoid	Keep away from heat, sparks, open flames and hot surfaces.
Incompatible Substances or Mixtures	Store away from oxidants.
Hazardous Decomposition Products	No data available

Section 11 – TOXICOLOGICAL INFORMATION

Acute Toxicity	No data available
Skin Corrosion/Irritation	No data available
Germ Cell Mutagenicity	No data available
<as Ethanol>	
Acute Toxicity	Acute oral toxicity (LD50 in rat):6000~17800 mg/kg.
Skin Corrosion/Irritation	Non-irritant (rabbit)
Germ Cell Mutagenicity	Ames test: negative

Section 12 – ECOLOGICAL INFORMATION

Environmental Hazards No information available
 Ecotoxicity No information available

<as Ethanol>
 Ecotoxicity LC50 (96hr in fathead minnow) >100mg/L

Section 13 – DISPOSAL CONSIDERATIONS

Residual Waste Contract an authorized waste disposal company, or a local public body who conducts the disposal, to dispose of the material.

For disposal, conform with the standards provided by related laws and local public bodies.

When commissioning the disposal to a disposal company, notify the danger and toxicity thoroughly to employees.

Contaminated Container and Packaging In case of disposal of empty containers, remove the content thoroughly.

Recycle containers after cleansing, or carry out the disposal under the related laws and regulations and the standards of the local governments.

Section 14 – TRANSPORT INFORMATION

International Regulations	Regulatory Information by Sea	Not applicable
	UN No.	Not applicable
	Marine Pollutant	Not applicable
	Regulatory Information by Air	Not applicable
	UN No.	Not applicable

	ADR/RID	IMDG	IATA
	Not regulated: aqueous solution An aqueous solution containing not more than 24% alcohol by volume is not subjected to the requirements.		
	ADR special provision SP144	IMDG special provision SP144	IATA special provision A58
UN number	NA	NA	NA
UN proper shipping name	NA	NA	NA
Transport hazard class	NA	NA	NA
Packaging group	NA	NA	NA

Section 15 – REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture
 <as MabXpure>

International inventories Not applicable
 Japanese regulations Not applicable

<as Ethanol>

International inventories TSCA and EINECS : listed
 Japanese regulations Industrial Safety and Health Act Dangerous or Harmful Substances Subject to Be Indicated their Names
 Dangerous Articles and Harmful Substances Whose Names, etc. Should Be Notified

Air Pollution Control Act Volatile Organic Compound

Act for the Prevention of Marine Pollution and Maritime Disasters Hazardous liquid

Foreign Exchange and Foreign Trade Act Catch-All Controls

Act on Control of Export, Import and Others of Specified Hazardous Wastes and Other Wastes Act 2, Paragraph 1, Item 1(1)

Chemical Safety Assessment For this substance a chemical safety assessment was not carried out.

Section 16 – OTHER INFORMATION

Other Property

Notice to Reader : To the best of our knowledge, the information contained herein is accurate.

However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of Final determination of suitability of any material is the sole responsibility of the information contained herein.

All materials may present unknown hazards and should be used with caution.

Information Contact

Although certain hazards are described herein, we cannot guarantee See Sec.1 (Company identification)