

Solution CellPreserv**SECTION 1 - IDENTIFICATION**

Product Identification:	Solution CellPreserv
Commercial name:	Methanol aqueous solution
Product Description:	Methanol-based buffered transport solution
Product Usage:	Preservative solution for supporting cells during transport and slide preparation
Internal Product Identification Code:	Solution: 02.8227
Company Name:	Kolplast CI SA
Address:	Estrada Municipal Benedito de Souza, 418, Bairro da Mina – ITUPEVA – ZIP CODE 13.295-364
Contact phone:	+ 55 11 4961-0900
E-mail:	vendas@kolplast.com.br
Toxic product order number:	S6 - UN 1992

SECTION 2 - HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture (Classification according to regulation (EC) 1272/2008)**

Flammable liquids (Category 2), H225

Acute Toxicity, Oral (Category 3), H301

Acute toxicity, Inhalation (Category 3), H331

Acute Toxicity, Dermal (Category 3), H311

Specific target organ systemic toxicity - single exposure (Category 1), Eyes, H370

2.2 Label Elements (Classification according to regulation (EC) 1272/2008)**Pictogram:****Warning word:** Danger**Danger Indications:** H225 Highly flammable liquid and vapors.

H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled.

H370 Causes damage to organs (Eyes).

Precautionary Statement: P210 Keep away from heat/sparks/open flames/hot surfaces. Do not smoke.

P233 Keep the container tightly closed.

P260 Do not inhale dusts/fumes/gases/mists/vapours/aerosols.

P264 Wash skin carefully after handling.

P280 Wear protective gloves/eye protection/face protection.

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Emergency Response: P301 + P310 + P330 IN CASE OF INGESTION: Immediately contact a TOXICOLOGICAL INFORMATION CENTER/doctor. Rinse your mouth.
P303 + P361 + P353 IN CASE OF CONTACT WITH SKIN (or hair): Immediately remove all contaminated clothing. Rinse skin with water/shower.
P308 + P311 IN CASE OF exposure or suspected exposure: Contact a TOXICOLOGICAL INFORMATION CENTER/doctor.
P370 + P378 In case of fire: For extinguishing use dry sand, dry chemical or alcohol resistant foam.

Storage: P403 + P233 Store in a well-ventilated place. Keep the container tightly closed.

Other dangers: There are no other dangers.

SECTION 3 - COMPOSITION AND COMPONENT INFORMATION

Component	CAS Registration No.	Weight (%)
Methanol - EINECS 200-659-6	67-56-1	30 - 60
Water	7782-13-5	40 - 70
Lubricant	56-81-5	1 - 2
Complexant	64-02-8	0.1 – 0.2
Stabilizer	50-00-0	0,0001

SECTION 4 - FIRST AID

4.1 General description of Emergency situations: **Flammable transparent product. Inhalation of vapors may cause non-specific discomfort (nausea, weakness), drowsiness with anesthetic effects and possible blindness. Ingestion of just 118 mL can cause blindness and in extreme cases, death.**

4.2 See a doctor in case of an emergency. In the meantime, follow the instructions below:

After inhalation: Remove victim to fresh air. If victim is not breathing, give artificial respiration.

After skin contact: Immediately remove contaminated clothing and shoes. Wash skin with plenty of water, preferably under an emergency shower.

After eye contact: Flush eyes with plenty of water, keeping eyelids apart. Preferably use an eye wash.

After ingestion: Do not induce vomiting. If victim is conscious, rinse mouth with plenty of clean water.

4.3 Potential effects on health status:


Inhalation: It can cause central nervous system depression, resulting in nausea, weakness, drowsiness and possible blindness.

Eye contact: May cause transient irritation.

Skin contact: May cause irritation or dermatitis.

Ingestion: May cause intoxication, central nervous system depression, nausea and dizziness. May cause liver, kidney and nervous system damage. May cause blindness and/or death.

Target organs: Liver, kidneys and central nervous system.

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		Code: FISPQ 001	
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Clinical conditions aggravated due to exposure:	Individuals with pre-existing retinal (eye) or liver disease may have an increased susceptibility to toxicity at low levels of continuous exposure (repeated exposure).		
Chronic:	Liquid and vapor can penetrate the skin and mucous membranes. It can cause chronic liver, kidney or central nervous system problems.		
SECTION 5 - FIRE FIGHTING MEASURES			
Flash point and method: 26.5°C (80°F) in a closed vessel.			
Auto-ignition temperature: 385°C (725°F).			
Inflammation limits: LEL-6.7 UEL-36 (based on methanol component).			
General Hazard: Flammable material. Heated material can form toxic and/or explosive vapors			
Fire Fighting Instructions:	Wear complete fire-fighting equipment with self-contained breathing apparatus. For small fires, use media such as: foam, dry chemical, or carbon dioxide. For high intensity, use large amounts of water from as far away as possible (flooding) applied as a fog or spray. Cool all deposits or vessels with large amounts of water. CARE! INVISIBLE FLAMES IN DAYLIGHT!		
Fire fighting equipment:	Use complete fire-fighting equipment with self-contained breathing apparatus		
Extinguishing Means:	Foam - YES Alcohol foam – YES CO ₂ – YES Chemical powder - YES Others – Water fog		
Hazardous combustion products:	Carbon monoxide and carbon dioxide.		
SECTION 6 - CONTROL MEASURES FOR SPILLS OR LEAKS			
6.1 Personal precautions, protective equipment and emergency procedures			
For non-emergency personnel:	Minimum precautions: Use personal protective equipment. Avoid breathing vapour/mist/gas. Ensure adequate ventilation. Cut off all sources of ignition. Evacuate personnel to safe areas. Beware of the accumulation of vapors that can form explosive concentrations. Vapors can accumulate in low areas.		
For emergency services personnel:	Use the PPE described in section 8 of the MSDS.		
6.2 Environmental precautions			
Spill on the ground:	Prevent spillage from draining into waterways. In large spills, erect barriers with clay. In small spills, absorb with clay or kitty litter. For spills larger than 190 litres, contact a company specializing in spill cleaning.		
Pour into water:	Prevent leakage or spillage if safe to do so. Do not allow the product to enter the sewage system – risk of explosion. Comply with applicable local and national regulations.		

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SECTION 7 - HANDLING AND STORAGE

Safe handling precautions: Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from any flame or source of ignition – No smoking. Take steps to prevent the build-up of static electricity. Handle in a ventilated environment and use the necessary PPE.

Safe storage conditions, including any incompatibilities: Keep tightly closed in a dry, ventilated place at room temperature (15° to 30°C) and away from sources of ignition. Do not smoke.

SECTION 8 - EXPOSURE CONTROL AND INDIVIDUAL PROTECTION

8.1 Control Parameters: DO NOT USE FOR UNINTERRUPTED PERIOD.
Exposure limits: TLV-TWA (ppm): 200 (PT).
Biological indicators: BEI (ACGIH, 2012): Methanol in the urine: 15 mg/L
Other indicators: 40 mg/kg bw/day Dermal exposure 260 mg/kg bw/day
Inhalation exposure.

8.2 Engineering control measures: Provide mechanical ventilation and a direct exhaust system to the outside environment. It is recommended to make emergency showers and eyewash stations available in the work area. Engineering control measures are the most effective in reducing product exposure.

8.3 Personal protection measures:

Eye/face protection: Wear safety glasses with side shields, goggles. S1/2, S16, S24/25, S37/39, S45.

Skin and body protection: Handle with gloves. Gloves must be inspected before use. Use a proper technique for removing gloves (without touching the outer surface of the gloves), avoiding contact with the product.

Breath protection: Protective masks with mist filters are recommended.

Hygiene measures: Wash with soap and water after handling the product and before eating, drinking, smoking or using the bathroom. Contact lenses pose a risk as they can absorb irritating particles. Keep workplaces within hygienic standards, always making employees aware of the safe handling of the product.

Other information: The PPE's to be used for the treatment and disposal of product residues and packaging are the same used to handle the product.

Solution CellPreserv**8.4 Exposure Time:****EC specific data:**

Ingrediente	ACGIH TLV®	Bélgica, Finlândia, Irlanda, Reino Unido	Dinamarca
Metanol	200 ppm – TWA 250 ppm – STEL Pele	200 ppm – TWA 250 ppm – STEL Pele	200 ppm – TWA Pele
LLV, MAC, MAK, OEL, TWA, VME, VLA-ED = 8 hr STEL, STV, VLE, VME-EC = 15 minutos	França 200 ppm – VME 1000 ppm – VLE	Alemanha 200 ppm TWA 1000 ppm máximo Pele	Grécia 200 ppm – TWA 250 ppm – STEL
	Países Baixos 200 ppm – MAC Pele	Noruega 100 ppm – OEL Pele	Espanha 200 ppm VLA-ED 250 ppm VLA-EC Pele
	Suécia 200 ppm LLV 250 ppm STV Pele	Suiça 200 ppm MAK 1000 ppm STEL Pele	

SECTION 9 - PHYSICAL - CHEMICAL PROPERTIES**Color:** Colorless**Physical State:** Liquid / Homogeneous**Odor:** Characteristic**Explosive Limits (%):** 6 / 36.5**Specific temperatures:** Do not store above 45°C**Solubility:** Soluble in water in any proportion**Evaporation rate:** 2.1 (BuAc=1)**Viscosity:** 0.544 – 0.590 mPa.s (25°C)**Density:** 0.792 g/cm³ in 25°C**Auto-ignition temperature:** 464°C**Vapor density (air = 1):** 1,1**Flash Point:** 12°C**SECTION 10 - STABILITY AND REACTIVITY****Reactivity:** It does not react under normal handling and storage conditions.**Chemical Stability:** The product is chemically stable under standard ambient conditions (room temperature).**Possibility of hazardous reactions:** Reacts violently with aluminum, oxidants and strong inorganic acids.**Conditions to avoid:** Heat and sparks. Extreme temperatures and direct sunlight.**Incompatible materials:** Strong oxidizing agents and acids.**Hazardous decomposition products:** The decomposition of the product leads to the formation of toxic and hazardous fumes such as carbon monoxide, carbon dioxide and formaldehyde.**SECTION 11 - TOXICOLOGICAL INFORMATION****Acute toxicity:** LD50 Oral in mice: 5628 mg/kg

DL50 Dermal in rabbits: 15,800mg/Kg

CL50 inhalation in mice: 85 mg/Kg

Skin corrosion/irritation: The product is non-irritating up to 2000ppm

Solution CellPreserv**Serious eye damage/eye irritation:** Irritating to eyes.**Respiratory or skin sensitization:** Irritating to mucous membranes.**Germ cell mutagenicity:** Are not known.**Carcinogenicity:** Are not known.**Toxicity to reproduction and lactation:** Methanol is associated with birth defects in rats after oral and inhalation exposure.**Systemic toxicity to certain target organs – single exposure:** Data not available.**Systemic toxicity to specific target organs – repeated exposures:** Data not available.**Aspiration hazard:** Data not available.**SECTION 12 - ECOLOGICAL INFORMATION****Ecotoxicity:** EC50 (72 hours): 8,000mg/L
Toxicity to fish: CL50 (96hs) 10,800mg/L (*Salmo gairdneri* / *Oncorhynchus mykiss*)
Toxicity to micro crustaceans: CE50 (48h): 24500mg/L (*Daphniamagna*)**Persistence and Degradability:** *On ground BOD5: 0.6/1.1g O2/g substance COD: 1.42 g O2/g substance. In water, methanol is readily biodegradable, being soluble in water. Methanol is transformed into CO2 and H2O.***Bioaccumulative potential:** Methanol has a bioconcentration coefficient lower than 10 for *Leuciscus idus*,
Log Pow: -0.82/-0.66**Mobility on the ground:** Miscible with water and can contaminate sewers, rivers, streams and other water currents. High mobility in soil is expected. Very volatile product.**Other adverse effects:** In the aquatic ecosystem, methanol can be very harmful to life:
a) In soil, it migrates to groundwater and/or evaporates quickly;
b) In water, its half-life is between 1-10 days;
c) In the air, it will persist as an aerosol for a short time, undergoing degradation photochemistry produced by hydroxyl radicals; residual methanol being removed from the atmosphere by rainfall**SECTION 13 - TREATMENT AND DISPOSAL CONSIDERATIONS****Recommended methods for final disposal:** Deactivate the product through incineration in ovens intended for this type of operation, equipped with effluent gas washing chambers and approved by the competent body.**Product leftovers:** Product leftovers are toxic. Do not discard product leftovers improperly after use. Biological treatment can be used for methanol residues, especially those of low concentration. Methanol residues are not suitable for underground injection.**Used packaging:** Class 1 waste, non-reusable, must not be incinerated. Any disposal practice of the product or packaging must comply with current environmental legislation.

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SECTION 14 - TRANSPORT INFORMATION

IMDG

N.º ONU/ID: UN1992

Official shipping name: FLAMMABLE LIQUID, TOXIC, N.S.A.**Hazard Class:** 3**Subsidiary hazard class:** 6.1**Packing group:** Description: UN1992, FLAMMABLE LIQUID, TOXIC, N.S.A (Methanol), 3 (6.1), III, (26°C C.C.)**Marine pollutant:** The solubilization of pure methanol (100%) in water is rapid and complete. The accompanying dilution reduces methanol concentrations to a level that is non-toxic to marine life in less than a mile, even for large catastrophic releases.**Special Provisions:** None. No. Prog. In: F-E, S-D.**Transport in bulk in accordance with Annex II of the MARPOL Convention**

There is no information available.

73/78 and the IBC Code:

RID

N.º ONU/ID: UN1992

Official shipping name: FLAMMABLE LIQUID, TOXIC, N.S.A.**Hazard Class:** 3**Labels:** 3 + 6.1**Packing group:** III - UN1992, Flammable liquid, toxic, n.s.a (Methanol), 3 (6.1), III**Danger to the Environment:** The solubilization of pure methanol (100%) in water is rapid and complete. The accompanying dilution reduces methanol concentrations to a level that is non-toxic to marine life in less than a mile, even for large catastrophic releases.**Classification code:** FT1**Special Provisions:** None.

ADR

N.º ONU/ID: UN1992

Official shipping name: FLAMMABLE LIQUID, TOXIC, N.S.A.**Hazard Class:** 3**Labels:** 3 + 6.1**Packing group:** III - Description: UN1992, Flammable liquid, toxic, n.s.a (Methanol), 3 (6.1), III**Danger to the Environment:** The solubilization of pure methanol (100%) in water is rapid and complete. The accompanying dilution reduces methanol concentrations to a level that is non-toxic to marine life in less than a mile, even for large catastrophic releases.**Special Provisions:** None.**Classification code:** FT1**Tunnel restriction code:** (D/E)

Solution CellPreserv**ICAO (airway)****N.º ONU/ID: UN1992****Official shipping name:** FLAMMABLE LIQUID, TOXIC, N.S.A.**Hazard Class:** 3**Packing Code:** 6.1**Packing group:** III - UN1992, Flammable liquid, toxic, n.s.a (Methanol), 3 (6.1), III

Danger to the Environment: The solubilization of pure methanol (100%) in water is rapid and complete. The accompanying dilution reduces methanol concentrations to a level that is non-toxic to marine life in less than a mile, even for large catastrophic releases.

Special Provisions: None.**IATA****N.º ONU/ID: UN1992****Official shipping name:** FLAMMABLE LIQUID, TOXIC, N.S.A.**Hazard Class:** 3**Subsidiary hazard class:** 6.1**Packing group:** III - Description: UN1992, Flammable liquid, toxic, n.s.a (Methanol), 3 (6.1), III

Danger to the Environment: The solubilization of pure methanol (100%) in water is rapid and complete. The accompanying dilution reduces methanol concentrations to a level that is non-toxic to marine life in less than a mile, even for large catastrophic releases.

Special Provisions: None.**Classification code:** FT1**ERG code:** 3P**SECTION 15 - REGULATIONS**

This Chemicals Information Sheet was prepared in accordance with ABNT (Brazilian Association of Technical Standards) NBR14725-4/2014, based on the European Guide to Safety Data Sheets (EUROPEAN CHEMICALS AGENCY, 2020) and also the Methanol Report Institute (Safe-Handling-Manual_5th-Edition)
Heads up: Pay attention to the possible existence of local regulations that were not foreseen in this document.

SECTION 16 - OTHER INFORMATION

The data contained herein are provided for guidance purposes based on current and reputable literature, however, we recommend that the appropriate user evaluations are carried out.
Kolplast CI SA is not responsible for any damage caused by misuse of the product.