SECTION 1 - CHEMICAL IDENTIFICATION

PRODUCT NAME:	Methanol (ACS Grade)
RPI CATALOG #:	M22055
SUPPLIER'S NAME:	Research Products International Corp.
SUPPLIERS ADDRESS:	410 N Business Center Drive Mount Prospect, Il 60056
EMERGENCY CONTACT:	1-800-424-9300
OTHER INFORMATION:	847-635-7330

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	Flammable liquids	Category 2
H301	Acute toxicity, oral	Category 3
H311	Acute toxicity Dermal	Category 3
H331	Acute toxicity, Inhalation	Category 3
H370	Specific target organ toxicity - single exposure	Category 1

2.2 GHS Label elements, including Hazard and Precautionary Statement(s)

Pictogram



Signal word: Danger

Hazard statement(s)

H225	Highly Flammable liquid and vapour
H301	Toxic if swallowed
H311	Toxic in contact with skin
H331	Toxic if inhaled
H370	Causes damage to organs.

Prevention, Response, Storage and Disposal Precautionary Statement(s)

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/.../equipment

P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P310	IF SWALLOWED: Call a POISON CENTER or doctor/physician.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308 + P311	IF exposed or concerned: call a POISON CENTER or doctor/ physician
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P321	Specific treatment (see. on this label).
P330	Rinse mouth.
P361 + P364	Take off contaminated clothing and wash before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

SECTION 3- COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	EINECS Number	Molecular Weight	Formula	Concentration
Methanol	67-56-1	200-659-6	32.04 g/mol	CH_4O	≤ 100 %

SECTION 4 - FIRST-AID MEASURES

4.1 Description of first aid measures

General advice: Consult a doctor and show this safety data sheet.

i. **If inhaled:** Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.

ii. **In case of skin contact:** Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.

iii. **In case of eye contact:** Flush with copious amounts of water for at least 15 minutes. Consult a doctor.

iv. **If swallowed:** Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed: To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

4.3 Indication of immediate medical attention and special treatment needed: Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishing media
Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

5.2 Special hazards arising from the substance or mixture: Carbon oxides.

5.3 Precautions for fire-fighters: Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

5.4 Further information: No data available

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures: Do not take action without suitable protective clothing - see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust or gas.

6.2 Environmental precautions: Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up: Cover spillage with suitable absorbent material. Using non-spark tools, sweep up material and place in an appropriate container. Decontaminate spill site with 10% caustic solution and ventilate area until after disposal is complete. Hold all material for appropriate disposal as described under section 13 of SDS.

6.4 Reference to other sections: For required PPE see section 8. For disposal see section 13.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling: Use in a chemical fume hood, with air supplied by an independent system. Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

7.2 Conditions for safe storage, including any incompatibilities: Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use. Keep in a dry place. Handle and store under inert gas. Storage class: Flammable liquids. Store at room temperature.

7.3 Specific end use(s): Use in a laboratory fume hood where possible. Refer to employer's COSHH risk assessment.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters:

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl alcohol	TWA: 200 ppm STEL: 250 ppm Skin	(Vacated) TWA: 200 ppm (Vacated) TWA: 260 mg/m^3 (Vacated) STEL: 250 ppm (Vacated) STEL: 325 mg/m^3 Skin TWA: 200 ppm TWA: 260 mg/m^3	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m^3 STEL: 250 ppm STEL: 325 mg/m^3

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Methyl alcohol	TWA: 200 ppm TWA: 262 mg/m^3 STEL: 250 ppm STEL: 328 mg/m^3 Skin	TWA: 200 ppm TWA: 260 mg/m^3 STEL: 250 ppm STEL: 310 mg/m^3	TWA: 200 ppm STEL: 250 ppm Skin

- **ACGIH:** American Conference of Governmental Industrial Hygienists
- **OSHA:** Occupational Safety and Health Administration
- **NIOSH IDLH:** The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

8.2 Exposure Controls

i. **Appropriate engineering controls:** Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place. Ensure laboratory is equipped with a safety shower and eye wash station.

8.3 Personal protective equipment

i. **Eye/face protection:** Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

ii. **Skin protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166

iii. **Body Protection:** Wear appropriate protective clothing. Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

iv. **Respiratory Protection:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

v. **Control of environmental exposure:** Do not let product enter drains

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Colorless Liquid	**Vapor Pressure (At 20.0 °C)**	128 hPa
Odor	Alcohol-like	**Vapor Density**	1.11
Odor Threshold	No Data Available	**Relative Density**	0.791
pH	No Data Available	**Water Solubility**	0.5 g/l at 15 °C
Melting / Freezing Point	-98 °C	**Partition Coefficient**	No Data Available
Initial Boiling Point Range	64.7 °C	**Auto-Ignition Temperature**	455 °C
Flash Point	12.0 °C	**Decomposition Temperature**	No Data Available
Evaporation Rate	5.2 (ether = 1)	**Viscosity**	No Data Available
Flammability (Solid, Gas)	No Data Available	**Explosive Properties**	No Data Available
Upper / Lower Flammability or Explosive Limits	31.00 vol % 6.00 vol %	**Oxidizing Properties**	No Data Available

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.
Hazardous Decomposition Products: Carbon monoxide (CO), Formaldehyde
Hazardous Polymerization: Hazardous polymerization does not occur.
Conditions to Avoid: Heat, flames and sparks
Incompatibilities: Acid chlorides, Acid anhydrides, oxidizing agents, Alkali metals, Reducing agents, Acids.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity

LD50 Oral	LD50Dermal	LC50 inhalation
1,187 - 2,769 mg/kg (Rat)	17,100 mg/kg (Rabbit)	128.2 mg/l (Rat) 4 h

SECTION 12 - ECOLOGICAL INFORMATION

Eco Toxicity: Do not empty into drains.

Component	Freshwater Fish	Microtox	Water Flea
Methyl alcohol	Pimephales promelas: LC50 > 10000 mg/L 96h	EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 mi	EC50 > 10000 mg/L -24h

Mobility

Component	log Pow
Methyl alcohol	-0.74

Persistence and degradability/ Bioaccumlative potential: No data available
Results of PBT and vPvB assessment: No data available
Other adverse effects: No data available
Chronic Toxicity: There are no known carcinogenic chemicals in this product

SECTION 13 - DISPOSAL CONSIDERATIONS

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Component	CAS#	RCRA - U Series Wastes	RCRA - P Series Wastes
Methyl alcohol	67-56-1	U154	-

SECTION 14 - TRANSPORT INFORMATION

	UN#	Proper Shipping Name	Hazard Class	Packaging Group
DOT	1230	METHANOL	3	II
TDG	1230	METHANOL	3	II
IATA	1230	METHANOL	3	II
IMDG/IMO	1230	METHANOL	3	II

SECTION 15 - REGULATORY INFORMATION

INTERNATIONAL INVENTORIES

TSCA	DSL	NDSL	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
Listed	Listed	-	-	-	Listed	Listed	Listed	Listed	Listed

USA FEDERAL REGULATION

SARA 311/312 HAZARDOUS CATEGORIZATION

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release Of Pressure Hazard	Reactive Hazard
Yes	Yes	Yes	No	No

SARA 313

Component	CAS#	Weight%	SARA 313 – Threshold Values %
Methyl alcohol	67-56-1	100	1.0

Clean Air Act

Component	CAS#	HAPS Data
Methyl alcohol	67-56-1	Listed

California Proposition 65: This product contains Proposition 65 chemicals.

Component	CAS#	California Prop. 65	Prop 65 NSRL	Category
Methyl alcohol	67-56-1	Developmental	-	Developmental

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Methyl alcohol	5000 lb	-

OSHA /TSCA 12(b)/ Clean Water Act: Not Applicable

HMIS Rating

Health hazard	Chronic Health Hazard	Flammability	Physical Hazard
2	*	**3**	**1**

NFPA Rating

Health Hazard	Fire Hazard	Reactivity Hazard
2	3	0

STATE RIGHT TO KNOW

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Methyl alcohol	**Listed**	**Listed**	**Listed**	**Listed**	**Listed**

US DEPARTMENT OF TRANSPORTATION

REPORTABLE QUANTITY (RQ)	DOT MARINE POLLUTANT	DOT SEVER MARINE POLLUTANT
Yes	**No**	**No**

U.S. DEPARTMENT OF HOMELAND SECURITY: This product does not contain any DHS chemicals.

Canada: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

This SDS complies with the requirements of Regulation (EC).

SECTION 16 - OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Research Products International Corp. shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. This product is sold for laboratory research and development purposes use only.