1. Product and Company Identifaction

Product Name	RXSOL-60-6103-2.5
Product Type	**METHANOL (Dried)**

Company Details:

RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

Stock Point : Mumbai, Kandla, Kolkata, Chennai, Vizag, Fujairah, Muscat, Nairobi

Phone	+91 22 65113333 / 5555 / 9999 / 27611360
Fax	+91 22 2781 1318:AOH :0091 9821214367
Email	mail@rxmarine.com

2. Composition / Information on ingredients

Chemica Name	CAS #	Percent	EINECS/ELINCS
Methyl alcohol	67-56-1	99.98	200-659-6

3. Hazards Identification

Appearance: clear, colorless. Flash Point: 11 deg C. Poison! Cannot be made non-poisonous. Causes eye and skin irritation. May be absorbed through intact skin. This substance has caused adverse reproductive and fetal effects in animals. Danger! Flammable liquid and vapor. Harmful if inhaled. May be fatal or cause blindness if swallowed. May cause central nervous system depression. May cause digestive tract irritation with nausea, vomiting, and diarrhea. Causes respiratory tract irritation. May cause liver, kidney and heart damage.
Target Organs: Kidneys, heart, central nervous system, liver, eyes.

Potential Health Effects
Eye: Produces irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury. May cause painful sensitization to light.
Skin: Causes moderate skin irritation. May be absorbed through the skin in harmful amounts. Prolonged and/or repeated contact may cause defatting of the skin and dermatitis.
Ingestion: May be fatal or cause blindness if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause systemic toxicity with acidosis. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. May cause cardiopulmonary system effects. Inhalation: Harmful if inhaled. May cause adverse central nervous system effects including headache, convulsions, and possible death. May cause visual impairment and possible permanent blindness. Causes irritation of the mucous membrane.
Chronic: Prolonged or repeated skin contact may cause dermatitis. Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion. Chronic exposure may cause reproductive disorders and teratogenic effects. Laboratory experiments have resulted in mutagenic effects. Prolonged exposure may cause liver, kidney, and heart damage.

4. First Aid Measures

Eyes	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids immediately.
Skin	Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothi medical aid if irritation develops or persists. Wash clothing before reuse.
Ingestion	If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious pe aid immediately. Induce vomiting by giving one teaspoon of Syrup of Ipecac.
Inhalation	Get medical aid immediately. Remove from exposure to fresh air immediately. If breathing is difficult, give oxy mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechani a bag and a mask.
Notes to Physician	Effects may be delayed. Ethanol may inhibit methanol metabolism.

5. Fire-fighting Measures

General Information	Containers can build up pressure if exposed to heat and/or fire. As in any fire, wear a self-contained breathing appa demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Water runoff can cause environmental collect water used to fight fire. Vapors can travel to a source of ignition and flash back. During a fire, irritating and may be generated by thermal decomposition or combustion. Flammable Liquid. Can release vapors that form exp temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Water may be ineffective. than water and a fire may be spread by the use of water. Vapors may be heavier than air. They can spread along the in low or confined areas. May be ignited by heat, sparks, and flame.
Extinguishing Media	For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. Use water spray to containers. Water may be ineffective. For large fires, use water spray, fog or alcohol-resistant foam. Do NOT use s water.

6. Accidental Release Measures

General Information	Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks	Scoop up with a nonsparking tool, then place into a suitable container for disposal. Use water spray to disperse the g all sources of ignition. Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermic combustible materials such as saw dust. Provide ventilation. A vapor suppressing foam may be used to reduce vapors reduce vapor but may not prevent ignition in closed spaces.

7. Handling and Storage

Handling	Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers material. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Empty containers retai (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid contact with heat, sparks and flame inhale. Use only in a chemical fume hood. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty sparks or open flames.
Storage	Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry, well-ventilate incompatible substances. Flammables-area. Keep containers tightly closed. Do not store in aluminum or lead containe

8. Exposure controls and personal protection

Engineering Controls	Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyew safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissibl Use only under a chemical fume hood.	
Exposure Limits	Chemical Name ACGIH NIOSH OSHA - Final PELs Methyl alcohol 200 ppm TWA; 250 ppm STEL; skin - poten absorption 200 ppm TWA; 260 mg/m3 TWA 6000 ppm IDLH 200 ppm TWA; 260 mg/m3 TWA	
OSHA Vacated PELs	Methyl alcohol	200 ppm TWA; 260 mg/m3 TWA; 250 ppm STEL; 325 mg/m3 STEL
Personal Protective Equipment	Eyes	Wear chemical goggles.
	Skin	Wear appropriate protective gloves to prevent skin exposure.
	Clothing	Wear appropriate protective clothing to prevent skin exposure.
	Respirators	A respiratory protection program that meets OSHA's 29 CFR ?1910.134 and ANSI Z88. European Standard EN 149 must be followed whenever workplace conditions warrant a resp

9. Physical and chemical properties

Physical State	Liquid
Appearance	Clear, colorless
Odor	alcohol-like - weak odor
pH	Not available.
Vapor Pressure	128 mm Hg @ 20 deg C
Vapor Density	1.14 (Air=1)
Evaporation Rate	5.4 (Ether=1)
Viscosity	0.55 cP 20 deg C

Boiling Point	64.3 deg C @ 760.00mm Hg
Freezing/Melting Point	98 deg C
Autoignition Temperature	464 deg C (867.20 deg F)
Flash Point	11 deg C (51.80 deg F)
Decomposition Temperature	Not available.
NFPA Rating	(estimated) Health: 1; Flammability: 3; Reactivity: 0
Explosion Limits, Lower	6.0 vol %
Explosion Limits Upper	36.00 vol %
Solubility	miscible
Specific Gravity/Density	0.79
Molecular Formula	CH3OH
Molecular Weight	32.04

METHANOL			
Test	Unit	Test Method	Results
Purity	wt%	ASTM E-346	99.98
Water	wt%	ASTM D-1364	0.0067
Ethanol	wt%	ASTM E-346	0.0044
Specific Gravity @20°/20°	-	ASTM D-4052	0.7925
Acetone	wt%	ASTM E-346	Less than 0.007
Permanganate time	-	ASTM D-1363	Greater than 50 ME
Non Volatile matter	-	ASTM D- 1353	Less than 0.0005gm
Distillation range @750 MMHG	DEGC	ASTM D-1078	0.4 including 64.5°
Colour, Pt-Cobalt scale	-	ASTM D-1209	Below 6 Apha
Carbonizable, Pt-Cobalt scale	-	ASTM E-346	Below 30 Apha
Clearance	-	-	Clear and free from suspended matter
Odour	-	ASTM D-1296	Non-residual
Acidity as CH3COOH	wt%	ASTM D-1613	0.002
Iron	PPM	ASTM E-202	0.01
Chloride	PPM	ASTM D-512	0.01
Miscibility	-	ASTM D-1722	Passes test
Alkalidity ASNN3	wt%	ASTM D-1614	NIL

10. Stability and reactivity

Chemical Stability	Stable under normal temperatures and pressures.
Conditions to Avoid	High temperatures, incompatible materials, ignition sources, oxidizers.
Incompatibilities with Other Materials	Acids (mineral, non-oxidizing, e.g. hydrochloric acid, hydrofluoric acid, muriatic acid, phosphoric acid), acids (mine chromic acid, hypochlorous acid, nitric acid, sulfuric acid), acids (organic, e.g. acetic acid, benzoic acid, formic aci oxalic acid), azo, diazo, and hydrazines (e.g. dimethyl hydrazine, hydrazine, methyl hydrazine), isocyanates (e.g. m nitrides (e.g. potassium nitride, sodium nitride), peroxides and hydroperoxides (organic, e.g. acetyl peroxide, benzo peroxide, methyl ethyl ketone peroxide), epoxides (e.g. butyl glycidyl ether), Oxidants (such as barium perchlorate, hydrogen peroxide, lead perchlorate, perchloric acid, sodium hypochlorite)., Active metals (such as potassium and m bromide, alkyl aluminum salts, beryllium dihydride, carbontetrachloride, carbon tetrachloride + metals, chloroform + + sodium hydroxide, cyanuric chloride, diethyl zinc, nitric acid, potassium-tert-butoxide, chloroform + hydroxi substances (e.g. acetic anyhdride, alkyl aluminum chloride, calcium carbide, ethyl dichlorosilane).

Hazardous Decomposition Products	Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, formaldehyde. Hazardous Polymerization: Will not occur.

11. Toxicological information