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### MATERIAL SAFETY DATA SHEET

Version :02

### **PRODUCT NAME: METHANOL**

CAS Number: 67-56-1

1. IDENTIFICATION:		
Product Code	90028, 90029, 90030, 90098, 90188, 90461, 90604, 90680, 90460, 90607, 90704, 9 90724, 93509, 94046, 94104, 96511, 97216, 98105, 98607, 98701, 99503, 999004, 133	,
Company Name	ADVENT CHEMBIO PRIVATE LIMITED	
Address	W-279, MIDC, TTC INDUSTRIAL AREA, THANE-BELAPUR ROAD, RABALE, NAVI MUMBAI - 400 701, MAHARASHTRA, INDIA.	
E-mail	sales@adventchembio.com	
WEBSITE	www.adventchembio.com	
Company Phone Number	<u>+91 77770 84837</u>	

### 2. HAZARDS IDENTIFICATION:

Hazard classification		
Physical hazards		
Flammable liquids	:	Category 2
Health hazards		
Acute Toxicity(Oral)	:	Category 3
Acute toxicity (Dermal)	:	Category 3
Acute toxicity (Inhalation - vapor)	:	Category 3
Skin corrosion/irritation	:	Category 2
Serious eye damage/eye irritation	:	Category 2
Toxic to reproduction	:	Category 2
Specific target organ toxicity - single exposure	:	Category 1
Labels elements		
Hazard symbol	:	
Signal word	:	Danger
Hazard statement	:	Toxic in contact with skin. Toxic if inhaled. Toxic if swallowed. Highly flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. Suspected of damaging fertility or the unborn child.

Causes damage to organs.



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Precautionary statement			
Prevention	precautions have been re- Wear protective gloves/ p Keep away from heat/ spa Keep container tightly clo Use explosion-proof elect Use only non-sparking too	ume/gas/mist/vapors/spray. and and understood. protective clothing/eye protection, arks/open flames/hot surfaces. No psed. Ground/bond container and i trical/ventilating/lighting/equipm ols. Take precautionary measures a	/ face protection. o smoking. receiving equipment. ient.
Response	IF ON SKIN (or hair): Take shower. IF IN EYES: Rinse cautio present and easy to do. C IF INHALED: Remove pers	Get medical advice/ attention. e off immediately all contaminated pusly with water for several minu continue rinsing. son to fresh air and keep comfortate ately call a POISON CENTER or doctor	utes. Remove contact lenses, if ole for breathing.
Storage	•	ntilated place. Keep container tigh resealed and kept upright to preve	•
Disposal	: Dispose of contents/con	ntainer to an appropriate treat ble laws and regulations, and pro	tment and disposal facility in
Other hazards which do not	-	mable liquid can become electrost	tatically charged even in bonded
result in GHS classification	and grounded equipmen explosion.	nt. Sparks may ignite liquid and	vapor. May cause flash fire or
	<b>c</b> 1 1	nt. Sparks may ignite liquid and	vapor. May cause flash fire or
	explosion.	nt. Sparks may ignite liquid and Percent	vapor. May cause flash fire or Hazardous
3. COMPOSITION/ INFORM	explosion.		· · ·
3. COMPOSITION/ INFORM	explosion. MATION ON INGRADIENTS: CAS Number	Percent	Hazardous
3. COMPOSITION/ INFORM Ingredient Methanol	explosion. MATION ON INGRADIENTS: CAS Number 67-56-1	Percent	Hazardous Yes
<ol> <li>COMPOSITION/ INFORM</li> <li>Ingredient</li> <li>Methanol</li> <li>FIRST AID MEASURES:</li> </ol>	explosion. MATION ON INGRADIENTS: CAS Number 67-56-1 Get medical advice/attent attendance. Call a physician or pois vomiting. If vomiting occ lungs.	Percent 99 - 100% tion if you feel unwell. Show this s son control center immediately. curs, keep head low so that stoma	Hazardous Yes afety data sheet to the doctor in Rinse mouth. Do NOT induce ach content doesn't get into the
<ol> <li>COMPOSITION/ INFORM</li> <li>Ingredient</li> <li>Methanol</li> <li>FIRST AID MEASURES:</li> <li>General information</li> </ol>	explosion. MATION ON INGRADIENTS: CAS Number 67-56-1 Get medical advice/attent attendance. Call a physician or pois vomiting. If vomiting occ lungs. Move to fresh air. Call a p : provide artificial respiration	Percent 99 - 100% tion if you feel unwell. Show this s son control center immediately. curs, keep head low so that stoma physician or poison control center on. If breathing is difficult, give oxy	Hazardous Yes Safety data sheet to the doctor in Rinse mouth. Do NOT induce ach content doesn't get into the immediately. If breathing stops,
<ul> <li>3. COMPOSITION/ INFORM</li> <li>Ingredient</li> <li>Methanol</li> <li>4. FIRST AID MEASURES:</li> <li>General information</li> <li>Ingestion</li> </ul>	explosion. MATION ON INGRADIENTS: CAS Number 67-56-1 Get medical advice/attent attendance. Call a physician or pois vomiting. If vomiting occ lungs. Move to fresh air. Call a p provide artificial respiration Get medical attention if st Immediately flush with pl	Percent 99 - 100% tion if you feel unwell. Show this s son control center immediately. curs, keep head low so that stoma physician or poison control center on. If breathing is difficult, give oxy ymptoms persist. lenty of water for at least 15 minut	Hazardous Yes afety data sheet to the doctor in Rinse mouth. Do NOT induce ach content doesn't get into the immediately. If breathing stops, ygen.
3. COMPOSITION/ INFORM         Ingredient         Methanol         4. FIRST AID MEASURES:         General information         Ingestion         Inhalation	explosion. MATION ON INGRADIENTS: CAS Number 67-56-1 Get medical advice/attent attendance. Call a physician or pois vomiting. If vomiting occ lungs. Move to fresh air. Call a p provide artificial respiration Get medical attention if so Immediately flush with pl lenses. Get medical attention Immediately flush with pl	Percent 99 - 100% tion if you feel unwell. Show this s son control center immediately. curs, keep head low so that stoma physician or poison control center on. If breathing is difficult, give oxy ymptoms persist. lenty of water for at least 15 minut tion.	Hazardous Yes afety data sheet to the doctor in Rinse mouth. Do NOT induce ach content doesn't get into the immediately. If breathing stops, /gen.
3. COMPOSITION/ INFORM         Ingredient         Methanol         4. FIRST AID MEASURES:         General information         Ingestion         Inhalation         Skin contact	explosion. MATION ON INGRADIENTS: CAS Number 67-56-1 Get medical advice/attent attendance. Call a physician or pois vomiting. If vomiting occ lungs. Move to fresh air. Call a p provide artificial respiration Get medical attention if st Immediately flush with pl lenses. Get medical attention immediately flush with pl lenses. Get medical attention	Percent 99 - 100% tion if you feel unwell. Show this s son control center immediately. curs, keep head low so that stoma physician or poison control center on. If breathing is difficult, give oxy ymptoms persist. lenty of water for at least 15 minut tion.	Hazardous Yes afety data sheet to the doctor in Rinse mouth. Do NOT induce ach content doesn't get into the immediately. If breathing stops, ygen. tes. If easy to do, remove contact tes. If easy to do, remove contact



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Conditions for safe storage,

gloves/protective clothing/eye

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medical attention and special treatment needed	
5. FIRE FIGHTING MEASUR	ES:
General information	: Flammable liquid and vapor.
Suitable (and unsuitable) ex	tinguishing media
Suitable extinguishing media	: Water spray, foam, dry powder or carbon dioxide.
Unsuitable extinguishing media	: Avoid water in straight hose stream; will scatter and spread fire.
Specific hazards arising from the chemical	Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentrations. Vapor from the solvent may accumulate in container headspace resulting in flammability hazard. Heat may cause the containers to explode.
Special firefighting procedures	<ul><li>Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting</li><li>the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.</li></ul>
Special protective equipment for fire-fighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
6. ACCIDENTAL RELEASE N	IEASURES:
Personal precautions, protective equipment and emergency procedures	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Avoid breathing mists or vapors. Keep upwind. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.
Methods and material for containment and cleaning up	<ul> <li>Eliminate all ignition sources if safe to do so. Use only non-sparking tools. Take precautionary measures against static discharges. Stop leak if possible without any risk.</li> <li>Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.</li> </ul>
Notification Procedures	Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.
Environmental precautions	Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
7. HANDLING AND STORA	GE:
Precautions for safe handling	Do not handle until all safety precautions have been read and understood. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. Ground/bond

container and receiving equipment. Use explosion-proof

electrical/ventilating/lighting/equipment. Use only non-sparking tools. Wear protective

Protection/ face protection. Avoid contact with eyes, skin, and clothing. Do not breathe mist or vapor. Use only with adequate ventilation. Wash hands thoroughly after handling.

Keep away from food, drink and animal feeding stuffs. Keep container tightly closed and



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including any	Store in a dry, well-ventilated place. Ground container and transfer equipment to eliminate
incompatibilities	static electric sparks. Comply with all national, state, and local codes pertaining to the
	storage, handling, dispensing, and disposal of flammable liquids.

### 8. EXPOSURE CONTROLS PERSONAL PROTECTION:

Control	parameters
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Occupational exposure limit	ts		
Chemical identity	Туре	Exposure Limit values	Source
METHANOL	TWA	200 ppm	US. ACGIH Threshold Limit Values (2011)
	STEL	250 ppm	US. ACGIH Threshold Limit Values (2011)
	STEL	250 ppm 325 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	REL	200 ppm 260 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	PEL	200 ppm 260 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	200 ppm 260 mg/m <sup>3</sup>	US.OSHA Table Z-1-A(29 CFR 1910.1000) (1989)
	STEL	250 ppm 325 mg/m <sup>3</sup>	US.OSHA Table Z-1-A(29 CFR 1910.1000) (1989)
Appropriate engineering			
controls	: No data availa	ble	
Individual protection measu	ires, such as persona	al protective equipment	
General information	rates should b ventilation, or exposure limit acceptable lev	e matched to conditions. If applicate other engineering controls to main s. If exposure limits have not been	es per hour) should be used. Ventilation able, use process enclosures, local exhaust ntain airborne levels below recommended established, maintain airborne levels to an r must be available in the immediate work
Eye/face protection		asses with side shields (or goggles).	
Hand protection	: Chemical resis	tant gloves.	

Other .... Wear suitable protective clothing.

 Respiratory protection
 In case of inadequate ventilation use suitable respirator. Chemical respirator with organic vapor cartridge.

 Always observe good personal hygiene measures, such as washing after handling the

Hygiene measures at a ways observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Provide eyewash station and safety shower. Avoid contact with eyes, skin, and clothing.



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9. PHYSICAL AND CHEMICAL PROPERTIES:		
Appearance	:	Clear, colorless liquid
Odor	:	Characteristic
Solubility	:	Miscible in water.
Molecular Formula	:	CH <sub>4</sub> O
Molecular Weight	:	32.04 g/mol
Specific Gravity	:	0.791 g/mL at 25 °C
рН	:	No data available.
% Volatiles by volume @ 21C (70F)	:	100
Boiling Point	:	64.7 °C
Melting Point	:	-98.0 °C
Flash Point	:	9.7 °C
Vapor Density (Air=1)	:	1.11
Vapor Pressure (mm Hg)	:	16.9 kPa at 25 °C
Evaporation Rate (BuAc=1)	:	6.3
10. STABILITY AND REACTIV	ITV·	

10. STABILITY AND REACTIV	/ITY:	
Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	Stable under recommended storage conditions.
Possibility of hazardous reactions	:	Hazardous polymerization does not occur.
Conditions to avoid	:	Heat, sparks, flames.
Incompatible materials	:	Strong oxidizing agents.
Hazardous decomposition products	:	Thermal decomposition may release carbon oxides.

### 11. TOXICOLOGICAL INFORMATION:

Information on likely routes of exposure	
Ingestion	: Irritating. May cause nausea, stomach pain and vomiting.
Inhalation	May cause irritation to the mucous membranes and upper respiratory tract. May cause : central nervous system effects
Skin contact	: Causes mild skin irritation



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Eye contact	:	Causes serious eye irritation.
Information on toxicological	effe	cts
Acute toxicity (list all possible	e ro	utes of exposure)
Oral Product	:	LD 50 (Rat): 5,628 mg/kg LD 50 (Rabbit): 14,400 mg/kg
Dermal Product	:	LD 50 (Rabbit): 15,800 mg/kg
Inhalation Product	:	LC 50 (Rat, 6 h): 87.5 mg/l
Repeated dose toxicity Product	:	In serious cases absorption in the body may lead to damage to the eyesight.
Skin corrosion/irritation Product	:	Prolonged or repeated skin contact may cause drying, cracking, or irritation
Serious eye damage/eye irritation Product	:	Irritating to eyes.
Respiratory or skin sensitization Product	:	Not a skin sensitizer.
Carcinogenicity Product	:	This substance has no evidence of carcinogenic properties
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans	:	No carcinogenic components identified.
US. National Toxicology Program (NTP) Report on Carcinogens	:	No carcinogenic components identified.
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050 Germ cell mutagenicity	:	No carcinogenic components identified.
In vitro Product	:	No mutagenic components identified.
Reproductive toxicity Product Specific target organ	:	Suspected of damaging fertility or the unborn child.
toxicity - single exposure Product Specific target organ	:	Central nervous system. Eyes.
toxicity - repeated exposure Product	:	No data available.
Aspiration hazard Product	:	May be harmful if swallowed and enters airways.
Other effects	:	No data available.



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12. ECOLOGICAL INFORMA	N·
Ecotoxicity	
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Acute hazards to the aquati	ivironment :
Fish Product	LC 50 (Fathead minnow (Pimephales promelas), 96 h): > 100 mg/l
Aquatic invertebrates Product	EC 50 (Water flea (Daphnia magna), 48 h): > 10,000 mg/l
Chronic hazards to the aqua	environment :
Fish Product	No data available.
Aquatic invertebrates Product	No data available.
Toxicity to Aquatic Plants Product:	No data available.
Persistence and degradabili	
<b>Biodegradation Product</b>	Expected to be readily biodegradable.
BOD/COD ratio Product	No data available.
Bioaccumulative potential	
Bioconcentration factor (BCF) Product	May accumulate in soil and water systems.
Partition coefficient n- octanol / water (log Kow)	No data available.
Product Specified substance(s)	Log Kow: -0.77
Mobility in soil	No data available.
Other adverse effects	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
13. DISPOSAL CONSIDERAT	l:
Disposal instructions	Discharge, treatment, or disposal may be subject to national, state, or local laws.
Contaminated packaging	Since emptied containers retain product residue, follow label warnings even after container is emptied.
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14. TRANSPORT INFORMATION:					
	UN No.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
DOT	UN 1230	Methanol	3(6.1)	II	No
IMDG	UN 1230	Methanol	3(6.1)	П	No
ΙΑΤΑ	UN 1230	Methanol	3(6.1)	П	No

#### **15. REGULATORY INFORMATION:**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture No Data Available.



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