SAFETY DATA SHEET

Version 1 of 1 • Print date 27.06.2023

060 Methanol 100

1. SUBSTANCE AND COMPANY IDENTIFICATION

Substance Identification:	Methanol 100%
Synonym	Methyl alcohol ; Carbinol ; Wood Alcohol
Product use:	Laboratory chemical. Laboratory and analytical use. Industrial use. Professional use.
Restriction on use:	Do not use for products in contact with foodstuff. Do not use for private purposes.
Supplier:	iSolvents Plot 62 Kameelfontein Pretoria 0075 South Africa Tel +27(0)12 012 5157
Emergency Telephone Numbers:	Rapid Spill Response 0800172743

2. HAZARD IDENTIFICATION

Classification according to SANS10228

Hazard class	Category	Hazard class and category	Hazard statement
Flammable liquid	2	Flammable Liquid 2	H225
Acute toxicity (oral)	3	Acute Toxicity 3	H301
Acute toxicity (dermal)	3	Acute Toxicity 3	H311
Acute toxicity (inhalation)	3	Acute Toxicity 3	H331
Specific Target Organ Toxicity – Single Exposure	1	STOT – Single Exposure 1	H370

The most important adverse physical hazard, human health hazard and environmental hazard
The product is combustible and can be ignited by potential ignition sources
The product is toxic when taken into the body

Label elements according to the Global Harmonized System

Signal word **Danger**

Pictograms

GHS02,GHS06, GHS08

Hazard statements

H225	Highly flammable liquid and vapour
H301+H311+H331	Toxic if swallowed, in contact with skin or if inhaled
H370	Causes damage to organs (eye)

Precautionary statements

Prevention statements

P210	Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking
P233	Keep container tightly closed
P240+P241+P242 +P243	Ground/bond container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge.
P260+P262+P264	Do not breathe gases or vapours. Do not get in eyes. Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response statements

P301+P316	IF SWALLOWED: Get emergency medical help immediately
P303+P361+P353	IF ON SKIN: Take off all contaminated clothing immediately. Rinse skin with water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing
P308+P317	IF exposed or concerned: Get emergency medical help.
P370+P378	In case of fire: Use class-B or dry extinguishing powder to extinguish
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents and container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance	Chemical identity	Common name	EC-No	CAS-No	Index-No	Reach Reg. No
1) 100% volume	Methanol	Methyl Alcohol ; Wood Alcohol	200-659-6	67-56-1	603-001-00-X	01-2119433307-44-xxxx

4. FIRST AID

Eye Contact	Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.
Inhalation	Call a physician immediately. If breathing is irregular or stopped, administer artificial rerspiration.
Ingestion	Rinse mouth immediately and drink plenty of water. Call a physician immediately.
Notable symptoms, acute and delayed	Coughing, Headache, Vertigo, Vomiting, Convulsions, Laboured breathing, Unconsciousness, Loss of righting reflex.
Further medical remarks	No known systemic effects.

5. FIRE FIGHTING

Extinguishing media

Suitable extinguishing media	Class B fire extinguishers, carbon dioxide (CO2) fire extinguishers, dry extinguishing powder, alcohol resistant foam, water spray.
Unsuitable extinguishing media	Water jet
Special hazards arising from the substance	Combustible. In the case of insufficient ventilation it may form explosive vapour mixtures with the air. Vapours are heavier than air so it spreads along the floors. Do not allow run-off into trenches, conduits and shafts.
Special protective equipment and precautions for fire-fighters	In the case of fire or explosions do not breathe in the fumes. Fight fire with the normal precautions from a reasonable distance. Wear self-contained breathing apparatus and full chemical protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:

For non-emergency personnel
Avoid contact with skin, eyes and clothes. Do not breathe in vapour or spray. Avoid sources of ignition.

Environmental precautions:

Keep away from drains, surface, and ground water. Avoid subsoil penetration. Danger of explosion.

Methods and material for containment and cleaning up:

1. Wear full protective clothing
2. Contain a spill by covering drains
3. Absorb with liquid-binding material like sand or universal binding agents that are inert (sand, silica gel, acid binder sawdust).
4. Place spillage in appropriate disposal container
5. Ventilate affected area

Neutralizing chemicals: alcohol-resistant foam, dry powder and water.

7. HANDLING AND STORAGE

Precautions for safe handling:

Measures to prevent fire as well as aerosol generation	Provide sufficient ventilation. Keep away from sources of ignition. No smoking. Take precautionary measures against static discharge. Due to danger of explosion always prevent leakage of vapours into ditches.

Advice on general occupational hygiene	Wash hands before breaks and after work. Keep away from food, drink and animal feed when handling.

Conditions for safe storage, including incompatibilities:

Safe storage	Store in a well-ventilated place. Use local and general ventilation. Keep container tightly closed. Protect from sunlight.
Storage temperature	Between 15-25°C
Incompatible substances or mixtures	Oxidizing agents, reducing agents alkali metals and acids.

E CONTROL NAL PROTECTIVE EQUIPMENT

Control parameters

Occupational Exposure Limit Values				
Country	**Name of agent**	**CAS No**	**Time Weighted Average (ppm)**	**Short-term Exposure Limits (ppm)**
RSA	Methanol	64-56-1	200	250

TWA: Time-weighted average (long-term exposure limit) measured in relation to a reference period of 8 hours.
STEL: Short-term exposure limit above which exposure should not occur within a 15-minute period.

Individual protection measures

Protective equipment	Eye protection: safety goggles with side protection Skin protection: suitable gloves made out of butyl rubber of 0.7mm thickness Wear flame retardant protective clothing Respiratory protection: Not required for normal conditions of use. Only necessary at aerosol or mist formation.
Other protection measures	Take recovery periods for skin regeneration if the skin is damaged. Use creams as a barrier to exposure
Environmental exposure Control	Keep away from drains and ground water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid at 20°C, 1,013 hPa
Colour	Colourless
Odour	Alcoholic
pH	Not determined
Melting point / freezing point	-98°C
Initial boiling point and boiling range	65°C at 1.013 hPa
Flash point	9.7°C (closed cup)
Evaporation rate	Slightly quicker than water
Flammability	Flammable liquid in accordance with GHS
Upper and lower explosive limits	44 vol% (UEL) and 5,5 vol% (LEL)
Vapour pressure	200 hPa at 30°C
Vapour density	Slightly heavier than air
Density	0.79 kg/dm^3 at 20°C
Partition coefficient	-0,77 (log value)
Auto-ignition temperature	455°C
Decomposition temperature	Not relevant
Viscosity	0,6 mPa s at at 25°C

10. STABILITY AND REACTIVITY

Reactivity	It's a reactive substance but stable under normal conditions. There is risk of ignition, especially if heated. Vapours may form explosive mixtures with air and aluminium.
Chemical stability	The material is stable under normal temperature and pressure, in ambient, anticipated storage and handling conditions.
Possibility of hazardous reactions	Danger of explosion with oxidisers, perchlorates, nitrogen oxides, chlorates, halogenates hydrocarbons, hydrogen peroxide, nitric acid and sulphuric acid Exothermic reactions with reducing agents. Dangerous reaction with fluorine and alkali metals.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and direct sunlight. No smoking
Incompatible materials	Aluminium, iron, zinc, plastic and rubber.
Hazardous decomposition products	Carbon monoxide and Carbon dioxide

11. TOXICOLOGY

Hazard classification according to GHS

Acute toxicity Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled

Toxicity	
Exposure route	**Toxicity value**
Oral	143mg per kg
Vapour inhalation	131mg every 4 hours
Dermal toxicity	15.8mg per kg

Skin corrosion/irritation
Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation
Shall not be classified as seriously damaging to the eye or eye irritant

Respiratory or skin sensitisation
Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity
Shall not be classified as germ cell mutagen

Carcinogenicity
Shall not be classified as carcinogenic

Reproductive toxicity
Shall not be classified as a reproductive toxicant

Single exposure for specific target organ
Causes damage to organs (eye)

Repeated exposure for specific target organ
Shall not be classified as a specific target organ toxicant for repeated exposure

Aspiration hazard
Shall not be classified as presenting an aspiration hazard

Endocrine disrupting properties
None

Symptoms related to the physical, chemical and toxicological characteristics	
If swallowed	Vomiting, abdominal pain, loss of righting reflex and ataxia. Convulsions. Unconsciousness.
If in eyes	Conjunctivitis (pink eye)
If inhaled	Vertigo, cough and headache.
If on skin	Has a degreasing effect on the skin.

12. ECOLOGY

Toxicity classification according to GHS

Toxicity Shall not be classified as hazardous to the aquatic environment

Aquatic toxicity		
Toxicity value	**Species**	**Exposure time**
15.4mg per litre	fish	96 hours
54.9mg per litre	Aquatic invertebrates	96 hours
22mg per litre	algae	96 hours

Persistence and degradability The substance is readily biodegradable.

Bio-accumulative potential It does not significantly accumulate in organisms

Mobility in soil No significant data on this

Endocrine disrupting properties None

13. DISPOSAL CONSIDERATIONS

Waste residues The material, and its waste residues, and its container must be disposed of as hazardous waste in accordance with SANS10234.

Safe Handling Do not empty into drains. Contain in a High-Density Poly-Ethylene (HDPE) plastic drum for disposal. Wear Personal Protective Equipment when handling and disposing the waste. Product waste must be segregated and handled separately by local and national waste management facilities.

Methods of disposal The waste drums must be given a serial number to identify it, its location, and its contents. Product waste can be landfilled or treated.

Contaminated packaging Dispose of with the waste.

14. TRANSPORT

Road, sea and air shipping codes
ADRRID – transport of dangerous goods by road
IMDG-Code – International Maritime Dangerous Goods for Marine environment
ICAO-TI – International Civil Aviation Organization

Methanol

UN number or ID number

ADRIDD	UN1230
IMDG-Code	UN1230
ICAO-TI	UN1230

UN proper shipping name

ADRRID	METHANOL
IMDG-Code	METHANOL
ICAO-TI	Methanol

Transport hazard class(es)

ADRRID	3(6.1)
IMDG-Code	3(6.1)
ICAO-TI	3(6.1)

Packaging group

ADRRID	II
IMDG-Code	II
ICAO-TI	II

Danger label(s)

15. REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product in question

Regulatory reference	SANS 10234; SANS 11014; SANS 10228; SANS 10229; SANS10231/2/3; Occupational Health and Safety Act 85 of 1993; National Road Traffic Act 93 of 1996

16. OTHER

Labelling according to SA directives.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text.

Issue date: 24/01/2024
Revision date: 23/01/2027

Full text of H-statements

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 (eye)

specified in the text.