SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Jena Bioscience

Methanol - 50 % w/v

Methyl alcohol

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Name:	Methanol - 50 % w/v
Catalog Number:	CSS-224
Supplier:	Jena Bioscience GmbH Loebstedter Strasse 71 07749 Jena, Germany
Telephone:	+49 - 3641 - 62 85 000
Fax:	+49 - 3641 - 62 85 100
e-Mail:	info@jenabioscience.com
WWW:	http://www.jenabioscience.com

2. HAZARDS IDENTIFICATION

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Flammable liquids (Category 2)	H225
Acute toxicity, Inhalation (Category 3)	H331
Acute toxicity, Dermal (Category 3)	H311
Acute toxicity, Oral (Category 3)	H301
Specific target organ toxity - single exposure (Category 3)	H370

Label elements

Pictogram

Signal word: Danger

Hazard statement(s)

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.

Precautionary statement(s)

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P280	Wear protective gloves/ protective clothing.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

Methanol - 50 % w/v

Methyl alcohol

P311	Call a POISON CENTER or doctor/ physician.

Supplemental Hazard information (EU)
none

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients according to Regulation (EC) No 1272/2008:
Methanol

Synonyms:	Methyl alcohol
Formula:	CH_3OH
Molecular Weight:	32.04 g/mol
CAS-No.:	67-56-1
EC number:	200-659-6
Concentration:	50 % w/v

4. FIRST AID MEASURES

If inhaled
If breathed in, move person into fresh air. If not breathing give artificial respiration.

In case of skin contact
Wash off with soap and plenty of water.

In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water.

Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in section 2 and/or in section 11.

5. FIRE-FIGHTING MEASURES

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

Special protective equipment for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Avoid dust formation.

Methanol - 50 % w/v

Methyl alcohol

Environmental precautions
Do not let product enter drains.

Methods and materials for containment and cleaning up
Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: store at 4 °C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment
Respiratory protection
Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection
For prolonged or repeated contact use protective gloves.

Eye protection
Safety glasses

Hygiene measures
General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form:	liquid

Safety data

pH:	
Melting point:	-98 °C
Boiling point:	64,7 °C
Flash point:	9,7 °C - closed cup
Ignition temperature:	455,0 °C at 1.013 hPa
Lower explosion limit:	Not explosive
Upper explosion limit:	Not explosive

Methanol - 50 % w/v

Methyl alcohol

Water solubility:	completely miscible

10. STABILITY AND REACTIVITY

Storage stability
Stable under recommended storage conditions.

Materials to avoid
Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids

Hazardous decomposition products
no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LDLO Oral	Human - 143 mg/kg (human), Remarks: Lungs, Thorax, or Respiration:Dyspnea. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
LD50 Oral	1.187 - 2.769 mg/kg (rat)
LC50 Inhalation	4 h - 128,2 mg/l (rat)
LC50 Inhalation	6 h - 87,6 mg/l (rat)
LD50 Dermal	17.100 mg/kg (rabbit)

Irritation and corrosion

Skin - rabbit	Result: No skin irritation
Eyes - rabbit	Result: No skin irritation

Sensitisation

Maximisation Test - guinea pig	Does not cause skin sensitisation. (OECD Test Guideline 406)

Germ cell mutagenicity

Ames test - S. typhimurium	Result: negative
in vitro assay - fibroblast	Result: negative, Mutation in mammalian somatic cells.
Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis) - mouse - male and female	Result: negative

Signs and Symptoms of Exposure
Methyl alcohol may be fatal or cause blindness if swallowed.
Effects due to ingestion may include:, Headache, Dizziness, Drowsiness, metabolic acidosis, Coma, Seizures.
Symptoms may be delayed., Damage of the:, Liver, Kidney
Central nervous system - Breathing difficulties - Based on Human Evidence

Methanol - 50 % w/v

Methyl alcohol

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish mortality LC50	Lepomis macrochirus (Bluegill) - 15.400,0 mg/l - 96 h NOEC - Oryzias latipes - 7.900 mg/l - 200 h
Toxicity to daphnia and other aquatic invertebrates EC50	Daphnia magna (Water flea) - > 10.000,00 mg/l - 48 h
Toxicity to algae Growth inhibition EC50	Scenedesmus capricornutum (fresh water algae) - 22.000,0 mg/l - 96 h

Elimination information (persistence and degradability)

aerobic - Exposure time 5 d	Result: 72 % - rapidly biodegradable

Further information on ecology

Bioaccumulation Cyprinus carpio (Carp) - 72 d at 20 °C	5 mg/l
Bioconcentration factor (BCF)	1,0

13. DISPOSAL CONSIDERATIONS

Product

Observe all federal, state, and local environmental regulations.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

UN number/ Proper shipping name

ADR/RID:	UN 1230 Methanol
IMDG:	UN 1230 Methanol
IATA:	UN 1230 Methanol

Transport hazard class(es)

ADR/RID:	3 (6.1)
IMDG:	3 (6.1)
IATA:	3 (6.1)

Packaging group

ADR/RID:	II
IMDG:	II
IATA:	II

Environmental hazards

ADR/RID:	no
IMDG:	no

Methanol - 50 % w/v

Methyl alcohol

IATA: no

15. REGULATORY INFORMATION

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

16. OTHER INFORMATION

Further information

This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Users should make independent decisions regarding completeness of the information based on all sources available.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

Jena Bioscience GmbH shall not be held liable for any damage resulting from handling or from contact with the above product. See our website for our terms and conditions of sales.