

# SAFETY DATA SHEET

SDS No.1021-46020

Date

November 6, 2017

1/4 page

## 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : Methyl Ethanoate (Methyl Acetate)  
NAME OF SUPPLIER : GL Sciences Inc.  
ADDRESS : 22-1 Nishishinjuku 6-chome Shinjuku-ku Tokyo 163-1130, Japan  
CHARGE SECTION : International Sales Section  
TELEPHONE No. : +81-3-5323-6620  
FACSIMILE No. : +81-3-5323-6621  
PRODUCT No. : 1021-46020  
SDS No. : 1021-46020  
Research use only.

## 2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION : Flammable liquid : Category 2  
Eye damage/irritation : Category 2B  
Specific target organ toxicity (Single exposure) : Category 1(nervous system)  
Category 3(respiratory irritation, an  
esthesia)  
Specific target organ toxicity (Repeat exposure) : Category 1 (nervous system)

HAZARD SYMBOL :



SIGNAL WORD : Danger

HAZARD STATEMENTS :

H225 High flammable liquid and vapour  
H320 Cause eye irritation  
H370 Cause damage to organs (nervous system)  
H335 May cause respiratory irritation  
H336 May cause drowsiness or dizziness  
H372 Cause damage to organs through prolonged or repeated exposure (nervous system)

PRECAUTIONARY STATEMENTS :

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.  
P260 Do not breathing dust/fume/gas/mist/vapours/spray.  
P270 Do not eat, drink or smoke when using this product.  
P264 Wash hands thoroughly after handling.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P271 Use only outdoors or in a well-ventilated area.  
P303+P361+P353 IF ON SKIN or hair: Take off immediately all contaminated clothing. Rinse skin with water.  
P370+P378 In case of fire: Use appropriate medias to extinguish.  
P305+ P351+ P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313 If eye irritation persists: Get medical attention.  
P308+P311 IF exposed or concerned: Call a POISON CENTER or doctor.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P314 Get medical attention if you feel unwell.  
P403+ P233+P235 Store in a well-ventilated place. Keep container tightly closed. Keep cool.

P405	Store locked up.
P501	Dispose of contents/container in accordance with all applicable regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL IDENTITY	: Methyl Ethanoate
SYNONYMS	: Methyl acetate
CONTENT	: > 99 %
CHEMICAL FORMULA	: CH <sub>3</sub> COOCH <sub>3</sub>
MOLECULAR WEIGHT	: 74.08
CAS No.	: 79-20-9
TSCA INVENTORY	: Listed
EINECS No.	: 201-185-2
EC INDEX No.	: 607-021-00-X

4. FIRST AID MEASURES

GENERAL ADVICE	: Consult a physician. Show this safety data sheet to the doctor in attendance.
INHALATION	: Move victim to fresh air. If breathing is difficult, give oxygen. If irritation persists, consult a physician.
SKIN CONTACT	: Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal. Consult a physician immediately.
EYE CONTACT	: Flush eyes well with flooding large amounts of running water for at least 15 minutes. Assure adequate flushing by separating the eyelids with sterile fingers. If possible, remove any contact lenses. Consult a physician immediately.
INGESTION	: Rinse mouth, give plenty of water to dilute the substance. Do not induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician immediately.

MOST IMPORTANT SYMPTOMS AND EFFECTS

: Inhalation; cough, sore throat, nausea, headache
Contact to skin/eye; dry, pain, redness
Digestion; vomiting

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA	: Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
FIRE & EXPLOSION HAZARDS	: Toxic, irritating, dust/fume/smoke may be emitted. Carbon monoxide may be foamed.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS	: Firemen should wear normal protective equipment(full bunker gear) and positive-pressure self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS	: Remove ignition sources and ventilate the area. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid raising dust and avoid contact with skin and eyes.
ENVIRONMENTAL PRECAUTIONS	: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
METHODS FOR CLEAN UP	: Do not touch spilled material without suitable protection. Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

HANDLING	: Keep away from ignition sources and ventilate the area – No smoking. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with eyes, skin, and clothing. Avoid inhalation of vapour or mist. Avoid prolonged or repeated exposure. Handle this product with suitable protection. Wear protections when cutting ample and treating this product.
STORAGE	: Store away from sunlight, heat and all ignition sources in well-ventilated dry place. Keep container tightly closed. Keep cool(2 ~ 10°C).
INCOMPATIBLE PRODUCTS	: Strong oxidizers, acids

8. EXPOSURE CONTROL/PERSONAL PROTECTION

- ENGINEERING MEASURES : Use exhaust ventilation to keep airborne concentrations below exposure limits.  
Use adequate ventilation.
- VENTILATION : Local Exhaust ; Necessary, Mechanical(General) ; Necessary
- CONTROL PARAMETERS
- ACGIH : TWA 200 ppm
- OSHA : TWA 200 ppm (610 mg/m<sup>3</sup>)
- NIOSH : TWA 200 ppm (610 mg/m<sup>3</sup>)
- PERSONAL PROTECTION
- RESPIRATORY PROTECTION : Use respirators approved under appropriate government standards and follow all regulations.
- HAND PROTECTION : Chemical resistant gloves
- EYE PROTECTION : Safety glasses(goggles)
- SKIN PROTECTION : Protective clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

- APPEARANCE : Colorless, clear liquid
- ODOR : Fragrance odor
- pH : No data available
- BOILING POINT : 56.8 °C
- MELTING POINT : -98 °C
- FLASH POINT : -13 °C (TCC)
- EXPLOSIVE LIMITS : 3.1 ~ 16 vol %
- VAPOR PRESSURE : 20,794 Pa (156 mmHg) (at 20°C)
- VAPOR DENSITY : 2.6
- SPECIFIC GRAVITY : 0.9279 g/cm<sup>3</sup> (at 25/4°C)
- SOLUBILITY IN
- Water : Miscible
- Organic solvent : Miscible
- PARTITION COEFFICIENT ; n-octanol/water : log Pow: 1.80
- AUTOIGNITION TEMPERATURE : 454 °C
- DECOMPOSITION TEMPERATURE : No data available

10. STABILITY AND REACTIVITY

- REACTIVITY : Deteriorate under heat, air, base, strong acids or UV influence.  
Form acetic acid under water-existing and corrode some metals.
- CHEMICAL STABILITY : Stable under recommended storage conditions.
- CONDITION TO AVOID : Sunlight, heat, open flames, high temperature, sparks, static electrical charge, other ignition sources, moisture
- INCOMPATIBLE MATERIALS : Oxidizers and strong acids
- HAZARDOUS DECOMPOSITION PRODUCTS : CO, CO<sub>2</sub> may be formed. Acetic acid, methyl alcohol may be formed.

11. TOXICOLOGICAL INFORMATION

- ACUTE TOXICITY : Oral; rat LD50>4,800 mg/kg (ACGIH (7th,2003) etc.)  
Dermal; rabbit LC50= > 2,000 mg/kg (EU-RAR (2003) etc.)  
Inhalation; rat LC50=2,000 ~ > 8,000 ppm (ACGIH (7th,2001) etc.)
- SKIN CORROSION/IRRITATION : Rabbit; irritating  
Human; not irritating (EU-RAR, 2003)
- EYE DAMAGE/EYE IRRITATION : Rabbit; irritating (EU-RAR, 2003)
- SENSITIZATION : Human; no sensitization (EU-RAR(2003), DFGOT vol.18(2002))
- GERM CELL MUTAGENICITY : in vitro; negative  
in vitro; negative (EU-RAR(2003) etc.)
- CARCINOGENICITY : No data available
- REPRODUCTIVE TOXICITY : No data available

---

SPECIFIC TARGET ORGAN TOXICITY - single exposure -

: This material has a respiratory irritation. Effect to human (Inhalation; cough, sore throat, breathing, hypoesthesia, headache, dizziness, weakness, unsteady gait, anesthetic action, loss of consciousness, lethargy, central nervous system depression, optic nerve injury. Digestion; abdominal pain, nausea, vomiting, weakness feeling, convulsions, dyspnea) (EU-RAR (2003) etc.)

## SPECIFIC TARGET ORGAN TOXICITY - repeated exposure -

: Effect to human (headache, dizziness, diminished eyesight, bilateral optic atrophy and field narrowing).

This material is decomposed into methanol and acetic acid in vivo, the optic neuropathy is thought to be due to metabolite methanol (ACGIH(7th,2013)).

## ASPIRATION HAZARD

: No data available

---

## 12. ECOLOGICAL INFORMATION

ECOTOXICITY : Green alga; EC50>120 mg/L,72h (EU-RAR,2003)

BIODEGRADABILITY : No data available

BIOACCUMULATIVE POTENTIAL : No data available

MOBILITY IN SOIL : No data available

OTHER ADVERSE EFFECTS : Not listed in Montreal Protocol list.

---

## 13. DISPOSAL INFORMATION

Dispose in a hazardous-waste site in accordance with all applicable regulations. Any disposal practice must be in compliance with country, local, state, and federal laws and regulations (contact country, local or state environment agency for specific rules).

---

## 14. TRANSPORT INFORMATION

## IATA

UN NUMBER : 1231

UN PROPER SHIPPING NAME : Methyl Acetate

CLASS : 3, flammable liquid

PACKING GROUP : II

ADR/RID : 1231, Methyl Acetate, II

DOT : 1231, Methyl Acetate, II

MARINE POLLUTANT : No

---

## 15. REGULATORY INFORMATION

US REGULATIONS : Labeling according to EC Directives; See section 2

EU REGULATIONS : Labeling according to EC Directives; See section 2

---

## 16. OTHER INFORMATION

## NOTICE:

The information contained in the SDS description is applicable exclusively to the chemical substance identified herein and for its intended use as an analytical reference standard or reagent and to the unit quantity intended for that purpose. The information does not relate to, and may not be appropriate for, any application or larger quantity of the substance described. Our products are intended for the use by individuals possessing sufficient technical skill and qualification on use the material potential hazardous chemical. Accordingly, no representation or warranty, express or implied, with respect to merchantability and fitness for a particular purpose is made with respect to the information contained herein.

## Attention:

This product in terms of chemical identity and the unit amount provide is intended for use in chemical analysis and not for human consumption, nor any other purpose.