Product Name: MLVB
Product Code: MLVB

SAFETY DATA SHEET

1. Product and Company Identification

Product Name: MLVB Chemical Type: Solvent Blend

Product Code: MLVB

Manufacturer: Plastic Process Equipment, Inc. **Revision Date**: 5/16/18

Address: 8303 Corporate Park Drive Emergency: 1-800-262-8200 ID 1195 (United States)

Macedonia, Ohio 44056 **Phone**: (800) 321-0562

2. Hazards Identification

2.1 Classification of the substance or mixture GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 2), H226 Skin irritation (Category 2), H315 Eye irritation (Category 2A), H319

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

2.2 GHS Label elements, including precautionary statements





Pictogram

Signal word Danger

Hazard statement(s)

Highly Flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May be fatal if swallowed and enters airways

Precautionary statement(s)

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ ventilating/ lighting/ equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

Wash skin thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/ protective clothing/ eye protection/ face protection.

IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Call a POISON CENTER or doctor/ physician if you feel unwell.

If skin irritation occurs: Get medical advice/ attention.

If eye irritation persists: Get medical advice/ attention.

Take off contaminated clothing and wash before reuse.

Product Name: MLVB
Product Code: MLVB

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents/ container to an approved waste disposal plant.

Routes of entry: Eyes, Skin, Ingestion, Inhalation

Potential acute health effects

Eyes May cause eye irritation

Skin Can enter lungs and cause damage.

Inhalation Can cause central nervous system (CNS) depression.

Ingestion Can cause central nervous system (CNS) depression. Aspiration hazard if

swallowed. Irritating to skin

3. Composition / Information on Ingredients

Ingredient	CAS Number	Wt%*
Proprietary Ingredient 3	Trade Secret 3	35-45%
Proprietary Ingredient 2	Trade Secret 2	20-30%
Proprietary Ingredient 1	Trade Secret 1	30-40%

^{*} The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First Aid Measures

EYE CONTACT: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

SKIN CONTACT: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

INHALATION: Move exposed person to fresh air. If not breathing, if breathing is irregular or if Respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

INGESTION: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

5. Fire Fighting Measures

GENERAL HAZARD: Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than

Product Name: MLVB
Product Code: MLVB
Product Code: MLVB
Total pages: Page 3 of 9

air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Special exposure hazards: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Extinguishing media:

Suitable: Use dry chemical, CO₂, water spray (fog) or foam

Not suitable: Do not use water jet

Hazardous thermal decomposition products: Decomposition products may include the following materials: carbon dioxide carbon monoxide, Hydrogen chloride gas, Hydrogen fluoride

6. Accidental Release Measures

LAND SPILL

Eliminate sources of ignition. Prevent additional discharge of material, if possible to do so without hazard. For small spills implement cleanup procedures; for large spills implement cleanup procedures and, if in public area, keep public away and advise authorities. Also, if this product is subject to CERCLA reporting (see Section 15 REGULATORY INFORMATION) notify the National Response Center. Prevent liquid from entering sewers, watercourses, or low areas. Contain spilled liquid with sand or earth. Do not use combustible materials such as sawdust. Recover by pumping (use an explosion proof or hand pump) or with a suitable absorbent. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

WATER SPILL

Eliminate sources of ignition. Warn occupants and shipping in surrounding and downwind areas of fire and explosion hazard and request all to stay clear. Remove from surface with suitable adsorbents. If allowed by local authorities and environmental agencies, sinking and/or suitable dispersants may be used in non-confined waters. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

7. Handling and Storage

Handling: FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN

ELECTROSTATIC ACCUMULATION HAZARD

Yes, use proper bonding and/or grounding procedure.

STORAGE TEMPERATURE

LOADING/UNLOADING TEMPERATURE

STORAGE/TRANSPORT PRESSURE

LOADING/UNLOADING VISCOSITY

Ambient Deg F:

Atmospheric mmHg:

1.5 cSt:

STORAGE AND HANDLING:

Keep container closed. Handle and open containers with care. Store in a cool, well ventilated place away from incompatible materials. Do NOT handle or store near an open flame, heat or other sources of ignition. Protect material from direct sunlight. Material will accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or

Product Name: MLVB
Product Code: MLVB
Total pages: Page 4 of 9

grounding procedures. Do NOT pressurize, cut, heat, or weld containers. Empty product containers may contain product residue. Do NOT reuse empty containers without commercial cleaning or reconditioning.

Product Name: MLVB Print Date: 7/11/18 Product Code: MLVB Total pages: Page 5 of 9

8. Exposure Controls / Personal Protection

EXPOSURE CONTROLS The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be handled in a lab hood. Provide mechanical ventilation of confined spaces. See respiratory protection recommendations.

PERSONAL PROTECTION For open systems where contact is likely, wear safety glasses with side shields, long sleeves, and chemical resistant gloves. Where contact may occur, wear safety glasses with side shields. Where concentrations in air may exceed the limits given in this Section and engineering, work practice or other means of exposure reduction are not adequate, NIOSH approved respirators may be necessary to prevent overexposure by inhalation.

WORKPLACE EXPOSURE GUIDELINES

Control parameters

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Proprietary Ingredient 3	STEL: 250 ppm TWA: 200 ppm	TWA: 200 ppm TWA: 610 mg/m³ (vacated) TWA: 200 ppm (vacated) TWA: 610 mg/m³ (vacated) STEL: 250 ppm	IDLH: 3100 ppm TWA: 200 ppm TWA: 610 mg/m³ STEL: 250 ppm STEL: 760 mg/m³
		(vacated) STEL: 760 mg/m ³	

Dimethyl Carbonate: ACGIH Not applicable OSHA Not applicable p-Chlorobenzotrifluoride: ACGIH Not applicable OSHA Not applicable

9. Physical and Chemical Properties

Appearance Liquid Color colorless

Odor solvent Odor Threshold Not determined

Melting point/freezing point Not determined Not determined

Flash point CLOSED CUP: -10°C (14°F) Boiling point / boiling range 57°C (134.6°F) OPEN CUP: -5.56°C (22°F) (Cleveland).

Flammability (solid, gas) Flammable

Evaporation rate Not determined

Flammability Limit in Air LOWER: 3.1% UPPER: 16% Vapor Pressure 173 mm of Hg (@ 20°C) Vapor density 2.8 (Air = 1)

Density 1.08 g/cm³ Relative density Not determined

Not determined Specific gravity Not determined **Bulk density**

Water solubility Easily soluble in methanol, diethyl ether. Soluble in cold water, hot water.

Partition coefficient (LogPow) Not determined

Autoignition temperature Not determined

Decomposition temperature Not determined Kinematic viscosity Not determined Dynamic viscosity Not determined Explosive properties Not an explosive

Oxidizing properties Not determined Product Name: MLVB
Product Code: MLVB
Product Code: MLVB
Total pages: Page 6 of 9

10. Stability and Reactivity

STABILITY: Stable

CONDITIONS TO AVOID INSTABILITY: Not applicable **HAZARDOUS POLYMERIZATION:** Will not occur

CONDITIONS TO AVOID HAZARDOUS POLYMERIZATION: Not Applicable

MATERIALS AND CONDITIONS TO AVOID INCOMPATIBILITY: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: None

11. Toxicological Information

Information on likely routes of exposure

Inhalation Inhalation of vapors in high concentration may cause irritation of

respiratory system

Eye contact Contact with eyes may cause irritation
Skin Contact Substance may cause slight skin irritation

Ingestion Ingestion may cause irritation to mucous membranes

ACUTE TOXICITY COMPONENTS

Proprietary Ingredient 2
Likely Route of Exposure:

Inhalation Yes Skin contact Yes Skin absorption: Yes

Eye contact Yes Ingestion Yes

Most important symptoms/effects, acute and delayed Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity Expected to be a low hazard for usual industrial or commercial handling by trained personnel. May cause mild eye irritation. May cause mild skin irritation. May cause respiratory irritation. May cause central nervous system effects.

LD50 Rabbit Dermal > 2000 mg/kg

LC50 Rat Inhalation 4468 ppm, 4 hours (vapor) 33 mg/l, 4 hours (vapor)

LD50 Rat Oral 13000 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eve damage/eve irritation

Direct contact may cause very mild, temporary irritation and redness.

Respiratory or skin sensitization

Respiratory sensitization Not expected to be a respiratory sensitizer.

Skin sensitizer Mild skin irritation. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Germ cell mutagenicity Not expected to be mutagenic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure

Respiratory tract irritation. The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

Specific target organ toxicity - repeated exposure

Not classified as a specific target organ toxicity -repeated exposure.

Aspiration toxicity Not expected to be an aspiration hazard.

Product Name: MLVB
Product Code: MLVB

Chronic effects Prolonged exposure may cause CNS (central nervous system) effects including dizziness, drowsiness and incoordination. Prolonged or repeated contact may cause drying, cracking and defatting of the skin.

Proprietary Ingredient 3

Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Proprietary Ingredient 3	> 5 g/kg (Rat)	> 5 g/kg (Rabbit)	= 16000 ppm (Rat) 4
. , ,			h

Skin corrosion/irritation Not classified

Serious eye damage/eye irritation Causes serious eye irritation.

Sensitization No information available

Germ cell mutagenicity No information available

Carcinogenicity No information available

Reproductive toxicity No information available

STOT - single exposure No information available

STOT - repeated exposure No information available

Aspiration hazard No information available

Proprietary Ingredient 1

Acute toxicity: Not classified

LD50 oral rat 13000 mg/kg (Rat)

LD50 dermal rabbit > 5000 mg/kg (Rabbit)

ATE US (oral) 13000.000 mg/kg body weight

Skin corrosion/irritation: Not classified Serious eye damage/irritation: Not classified

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified Reproductive toxicity: Not classified

Specific target organ toxicity (single exposure): Not classified Specific target organ toxicity (repeated exposure): Not classified

Aspiration hazard : Not classified

Symptoms/injuries after inhalation: Irritation of the respiratory tract. Dry/sore throat. Coughing.

Dizziness. Narcosis. Respiratory difficulties.

FOLLOWING SYMPTOMS MAY APPEAR LATER:

Risk of lung oedema.

Symptoms/injuries after skin contact: Red skin. Tingling/irritation of the skin.

Symptoms/injuries after eye contact: Irritation of the eye tissue.

Symptoms/injuries after ingestion: Risk of aspiration pneumonia. Dry/sore throat. Nausea.

Abdominal pain. Diarrhoea.

12. Ecological Information

Ecotoxicity This product has not been tested for ecotoxicity

Product Name: MLVB
Product Code: MLVB
Product Code: MLVB
Total pages: Page 8 of 9

13. Disposal Considerations

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

DISPOSAL RECOMMENDATIONS

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty Container Warning Empty containers may retain residue and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

14. Transport Information

PROPER SHIPPING NAME: UN1993, Flammable Liquid N.O.S., 3, PG II

HAZARD CLASS: Flammable Liquid

DOT PROPER SHIPPING LABEL: Flammable

15. Regulatory Information

OSHA HAZARD COMMUNICATION STANDARD: When used for its intended purpose, this material is classified as hazardous in accordance with OSHA 29CFR 1910.1200.

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, **Section** 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard

California Proposition 65 Carcinogens: 75-07-0 Acetaldehyde California Proposition 65 Reproductive Toxins: 67-56-1 Methanol

Product Name: MLVB
Product Code: MLVB

16. Other Information

HAZARD RATING SYSTEMS:

	NPCA-HMIS	NFPA 704	KEY
HEALTH	2*	2	4 = Severe
FLAMMABILIT	Y 3	3	3 = Serious
REACTIVITY	0	0	2 = Moderate
			1 = Slight
			0 = Minimal

CAUTION: HMIS ratings are based on a 0-4 rating scale with 1representing minimal hazards or risks, and 4 representing significant hazards or risks. Recommended HMIS ratings should not be used in the absence of a fully implemented HMIS hazard communication program.

Note: For industrial use only. The information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. Plastic Process Equipment, Inc makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances. Effects can be aggravated by other materials and/or this material may aggravate or add to the effects of other materials. This material may be released from gas, liquid, or solid materials made directly or indirectly from it. User has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. User must meet all applicable safety and health standards. Possession of an MSDS does not indicate that the possessor of the MSDS was a purchaser or user of the subject product. 5/16/2018