SAFETY DATA SHEET

Methyl Acetate (Co-Product)

1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

PRODUCT IDENTIFIER:
Methyl Acetate (Co-Product)

RECOMMENDED USE AND USE RESTRICTIONS:
Solvent. See attached "Medical Caution Bulletin No. 1", at end of SDS for use restrictions.

MANUFACTURER / SUPPLIER:
Alpek Polyester USA, LLC.
7621 Little Ave., Suite 500
Charlotte, NC 28226
www.AlpekPolyester.com

EMERGENCY PHONE NUMBERS:

Product Information:		1-800-237-8275
Transport Emergency:	CHEMTREC	1-800-424-9300

2. HAZARDS IDENTIFICATION

OSHA HAZARD CLASSIFICATION:
Specific Target Organ Toxicity – Single Exposure (Category 1 and 3)
Carcinogenicity (Hazard Category 1A)
Germ Cell Mutagenicity (Hazard Category 1B)
Flammable Liquid (Hazard Category 2)
Eye Damage/Irritation (Hazard Category 2A)
Acute Toxicity – Oral (Hazard Category 4)
Acute Toxicity – Dermal (Hazard Category 4)
Acute Toxicity – Inhalation (Hazard Category 4)

SIGNAL WORD, HAZARD STATEMENTS, SYMBOLS AND PRECAUTIONARY STATEMENTS

SIGNAL WORD: Danger

HAZARD STATEMENT(S):
Highly flammable liquid and vapor.
Harmful if swallowed or inhaled.
Harmful in contact with skin.
Causes serious eye irritation.
Causes damage to neural tissue/eyes from oral exposure.
May cause drowsiness or dizziness.
May cause genetic defects and cancer.

SYMBOL(S):

PRECAUTIONARY STATEMENT(S):

- Prevention:
  - Obtain special instructions before use.
  - Do not handle until all safety precautions have been read and understood.

- Keep away from sources of heat, sparks, flame, impact, friction, electricity, and any other sources of ignition. No smoking. Use only non-sparking tools.
- Use explosion-proof electrical, ventilation, lighting, and equipment.
- Keep container tightly closed.
- Take precautionary measures against static discharge. Ground/bond container and receiving equipment.
- Wear protective gloves, protective clothing, safety glasses with side shields (or goggles) and a face shield.
- Wash thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Do not breathe gases, vapors, mists, and sprays.
- Use only outdoors or in a well-ventilated area.

➢ Response:

- If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with plenty of water for 15 minutes.
- Take off contaminated clothing and wash it before reuse.
- If in eyes: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- In case of fire: Use water spray, alcohol foam, carbon dioxide (CO_2), or dry chemical to extinguish.
- If swallowed: Call a poison center or doctor if you feel unwell. Rinse mouth.
- If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a doctor.
- If exposed, concerned, or feel unwell: Get medical advice/attention. As warranted, immediately call a poison center or doctor.

➢ Storage:

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

➢ Disposal:

Dispose of contents/container to an approved waste disposal plant, in accordance with local/regional/national/international regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS*:

Material	**CAS Number**	**%**
Methyl Acetate	79-20-9	90-95
Methanol	67-56-1	1-8
Water	7732-18-5	1-4
Propyl Acetate	109-60-4	<2
Unknown impurities not applicable	-	<1
Acetic Acid	64-19-7	<1
Methyl Formate	107-31-3	<0.3
Toluene	108-88-3	<0.3
Acetaldehyde	75-07-0	<0.2
Benzene	71-43-2	<0.2
Ethyl Acetate	141-78-6	<0.2
Methyl Bromide	74-83-9	<0.1
n-Propanol	71-23-8	<0.1

* Stated ranges are based on averages. Concentrations may vary.

4. FIRST AID MEASURES

DESCRIPTION OF NECESSARY MEASURES:

INHALATION: Move to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician or poison control center immediately.

SKIN CONTACT: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician or poison control center immediately. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

EYE CONTACT: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention. In case of irritation from airborne exposure, move to fresh air. Get medical attention if symptoms persist.

INGESTION: Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.

MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED:
Prolonged and repeated exposure to high vapor concentrations, skin absorption or ingestion of methanol may result in visual disturbances, metabolic acidosis, headache, giddiness, nausea, insomnia, gastric disturbance, dizziness, and slow breathing. Symptoms of poisoning may not appear for several hours. Keep under medical supervision for at least 48 hours.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT:
May be absorbed into the body by inhalation and cause permanent damage to the nervous system, including the brain. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Treat symptomatically.

Note to Physicians: Symptoms of poisoning may not appear for several hours. Keep under medical supervision for at least 48 hours.

5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:
Water Spray, Alcohol Foam, Carbon Dioxide (CO_2), or Dry Chemical.

SPECIFIC HAZARDS ARISING FROM CHEMICAL:
HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide and carbon monoxide.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS:
Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Wear full protective equipment. USE WATER WITH CAUTION. Water may be ineffective in fighting the fire. Use water spray to keep fire-exposed containers cool. 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.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS / PROTECTIVE EQUIPMENT / EMERGENCY PROCEDURES
Highly flammable liquid and vapor. Remove source of heat, sparks, flame, impact, friction, electricity, and any other sources of ignition. No smoking.

Review Section 5. FIRE FIGHTING MEASURES and Section 7. PRECAUTIONS FOR SAFE HANDLING before proceeding with clean-up. Use appropriate Personal Protective Equipment during clean-up.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:
Eliminate all ignition sources. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. For Large Spills: Use water spray to disperse vapors and dilute spill to a nonflammable mixture. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:
Personal Precautionary Measures: Do not breathe gases, vapors, mists, and sprays. Do not get in eyes, on skin, on clothing. Do not taste or swallow. Use only with adequate ventilation. Wash thoroughly after handling.

Prevention of Fire and Explosion: Highly flammable liquid and vapor. Keep away from sources of heat, sparks, flame, impact, friction, electricity, and any other sources of ignition. No smoking. Keep from contact with oxidizing materials. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of flammable liquids.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATABILITIES:
Keep container tightly closed and in a well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:

	Methyl Acetate	Methanol	Acetic Acid	Benzene	Methyl Formate
PEL (OSHA):	200 ppm	200 ppm	10 ppm	1 ppm 5 ppm (STEL)	100 ppm
TLV (ACGIH):	200 ppm 250 ppm (STEL)	200 ppm 250 ppm (STEL)	10 ppm 15 ppm (STEL)	0.05 ppm 2.5 ppm (STEL)	50 ppm 100 ppm (STEL)

	Propyl Acetate	Ethyl Acetate	Acetaldehyde	Toluene
PEL (OSHA):	200 ppm	400 ppm	200 ppm	200 ppm 300 ppm (Ceiling) 500 ppm (10-Min Peak per 8 Hr. shift)
TLV (ACGIH):	100 ppm 150 ppm (STEL)	400 ppm	25 ppm (Ceiling)	20 ppm

* All exposure limits presented are 8-hour time weighted average (TWA) limits unless otherwise noted. Only limits for chemicals in concentrations potentially over 0.1% of the mixture have been provided. Limits for other constituents can be found in the ACGIH Guide to Occupational Exposure Values handbook and OSHA website.

APPROPRIATE ENGINEERING CONTROLS:
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

INDIVIDUAL PROTECTION MEASURES / PERSONAL PROTECTIVE EQUIPMENT:
EYE/FACE PROTECTION: Wear safety glasses with side shields (or goggles) and a face shield.

RESPIRATORY PROTECTION: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, a NIOSH approved respirator should be selected based on the form and concentration of the contaminant in air and in accordance with the OSHA Respiratory Protection Standard (29 CFR 1910.134). Contact health and safety professional or respirator manufacturer for specific selection information.

PROTECTIVE CLOTHING: Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

RECOMMENDED DECONTAMINATION FACILTIES: Eyewash station, safety shower, washing facilities.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colorless liquid	**Flammability Limits (Upper/Lower):**	No data available
Odor:	Ester	**Vapor Pressure:**	135.9 mbar @ 9.4 °C
Odor Threshold:	No data available	**Vapor Density:**	2.6
pH:	No data available	**Specific Gravity:**	0.93 at 15 °C
Melting Point:	-98 °C	**Solubility in Water:**	Appreciable
Initial Boiling Point and Boiling Range:	57 °C	**Partition coefficient (n-octanol/water):**	No data available
Flash Point:	-14 °C (Tag closed cup)	**Auto-Ignition Temperature:**	502 °C
Evaporation Rate:	No data available	**Decomposition Temperature:**	No data available
Flammability:	No data available	**Viscosity:**	0.403 mPa.s at 15 °C

10. STABILITY AND REACTIVITY

REACTIVITY:
None known.

CHEMICAL STABILITY:
Stable; however, material can decompose at elevated temperatures. Polymerization will not occur.

POSSIBILITY OF HAZARDOUS REACTIONS:
Not known.

CONDITIONS TO AVOID:
Decomposes at elevated temperatures. Avoid sources of ignition.

INCOMPATIBILE MATERIALS:
Strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS:
Carbon dioxide and carbon monoxide.

11. TOXICOLOGICAL INFORMATION

INFORMATION ON LIKELY ROUTES OF EXPOSURE:
Inhalation of gases/vapors. Absorption through skin contact.

SYMPTOMS RELATED TO PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:

- Harmful if inhaled. May cause irritation to the respiratory system. High vapor concentrations may cause drowsiness or dizziness.
- Harmful if swallowed.
- Harmful in contact with skin.
- Prolonged or repeated skin contact may cause drying, cracking, or irritation.
- Causes serious eye irritation.
- May cause drowsiness or dizziness.

ACUTE, DELAYED, AND CHRONIC EFFECTS FROM SHORT AND LONG-TERM EXPOSURE:

- Prolonged and repeated exposure to high vapor concentrations, skin absorption or ingestion of methanol may result in visual disturbances, metabolic acidosis, headache, giddiness, nausea, insomnia, gastric disturbance, dizziness, and slow breathing.
- Causes damage to neural tissue/eyes from oral exposure. There have been severe cases reported of blindness, coma and death due to the ingestion of methanol.
- May cause genetic defects and cancer.

NUMERICAL MEASURES OF TOXICITY

- Methyl Acetate:
  - Oral LD_{50} (Rat): 6,482 mg/kg (highest dose tested)
  - Oral LD_{50} (Rabbit): 3,700 mg/kg
- Methanol: Oral LD_{50} (Rat): 5,600 mg/kg

CARCINOGENICITY INFORMATION:

- IARC (International Agency for Research on Cancer): Benzene – Carcinogenic to humans; Acetaldehyde – Possibly carcinogenic to humans.
- NTP (National Toxicology Program): Benzene – Known to be a carcinogen; Acetaldehyde – Reasonably anticipated to be a human carcinogen.

12. ECOLOGICAL INFORMATION

No toxicity data is available.

13. DISPOSAL CONSIDERATIONS

Discharge, treatment, or disposal may be subject to national, state, or local laws. Incinerate. Since emptied containers retain product residue, follow label warnings even after container is emptied. Residual vapors may explode on ignition; do not cut, drill, grind, or weld on or near this container.

14. TRANSPORTATION INFORMATION

SHIPPING INFORMATION:

DOT (USA)
Reportable Quantity: 454 kg (BENZENE, methanol)
Possible Shipping Description(s):
Methyl acetate
3 UN 1231 II

Sea – IMDG (International Maritime Dangerous Goods)
Possible Shipping Description(s):
Methyl acetate
3 UN 1231 II

Air - ICAO (International Civil Aviation Organization)
Possible Shipping Description(s):
Methyl acetate
3 UN 1231 II

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

- OSHA (Occupational Safety and Health Administration): benzene: cancer hazard.
- TSCA (US Toxic Substances Control Act): All components of this product are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

INTERNATIONAL REGULATIONS:

- DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act): All components of this product are listed on the DSL. Any impurities present in this product are exempt from listing.

16. ADDITIONAL INFORMATION

The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

SDS Revision Date: September 1, 2023

End of SDS

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End of Bulletin