

MATERIAL SAFETY DATA SHEET

1. Manufacturer Information:

Product name : VINYFOIL C-4636
Company : Mitsubishi Plastics, Inc.
Address : Mitsubishi Jushi Bldg., 1-2-2 Nihonbashihongokucho,
Chuo-ku, Tokyo 103-0021, Japan
Department in charge : Electronics & Industrial Film Department
Tel. : +81-3- 3279-3042
Fax. : +81-3-3279-6677
Mail address : mpi7041@cc.mpi.co.jp
Emergency phone No. : +81-3- 3279-3042
Recommended and restriction in use : Cards

Serial No. 727-006

Revision : July 30, 2010

2. Summary of hazardous and toxicity

Name of classification : Not applicable
Physical and chemical hazards : Not applicable
Adverse human health effects : Not applicable
Ecological effect : Not applicable

As toxic gas (content:HCl,CO₂,CO) will form upon combustion, ventilate the area and wear protective equipment (breathing apparatus).

3. Composition and ingredient

Single or mixture : Mixture
Chemical name : Polyvinyl chloride, polymer additives, stabilizer , white pigment etc.
Official gazette serial No. (Chemical Substance Control Law): Polyvinyl chloride (6)-66
Vinyl chloride-Vinyl acetate copolymer (6)-76
Official gazette serial No. (Workers' safety and Health Law) : Titanium oxide(Serial No.191)
Organic tin compounds (Serial No. 322)

Ingredient & content:

Ingredient:	Content	CAS No.
Polyvinyl chloride	80%	9002-86-2
Vinyl chloride-Vinyl acetate copolymer polymer additives, stabilizer etc.	20%	9003-22-9

Chemical formula : Polyvinyl chloride (CH₂CHCl)_n
Vinyl chloride-Vinyl acetate copolymer (CH₂CHCl)_n (CH₂CHOAc)_m

4. First aid measures:

Eye contact	: Immediately wash with plenty of fresh water as it is likely to cause injury. If abnormal feeling occurs, ask for medical help.
Skin contact	: Not required
Ingestion	: Try to get the victim to vomit. If abnormal feeling occurs, ask for medical help.
Inhalation	: Remove the victim from the contamination immediately to fresh air. If cough and suffocation will be occurred, refer for medical attention.

5. Fire fighting

Extinguishing method	: Firefighters should wear proper protective equipment.
Extinguishing media	: Water, dry chemical, foam
Others	: As toxic gas (content: Cl, CO ₂ , CO) will form upon combustion,

6. Accidental release measures

Precaution to human being	: As this is a solid matter having certain shape, not applicable.
Precaution to environment	: Prevent the overflow product (such as cut dust) into river or outdoor causing adverse effect on the environment.

7. Caution upon handling and storage

Handling	: Keep the product away from the fire source. Don't wrap with plastic wrap directly to maintain the quality. As packed product is heavy, wear proper protective equipment for legs, hands and lap.
Storage	: Avoiding direct sunshine and moisture, store in a well-ventilated location. Prevent cargo breaks loose.

8. Exposure protection measures

Concentration limit (Ministry of Labor standard)	: Not specified.
Allowable concentration	
Japan Industrial Hygiene	: Not specified.
ACGHI	: Not specified
Facilities measures	: .Not specified
Protection gears:	
Respiratory protection	: Not required
Protection glasses	: Not required
Protective gloves	: Not required

Protective clothes

: Not required

9. Physical & Chemical properties:

Appearance	: Solid (Sheets)
Vapor pressure	: None
Volatility	: None
Boiling point	: None
Density	: 1.4
Melting point	: None
Solubility (Water)	: Not soluble
Other	: Softening at 60°C

10. Hazards identification (Stability & Reactivity) Polyvinylchloride

Flash point	: 390°C
Ignition point	: 455°C
Combustibility	: Self-extinguishing plastics; oxygen index 45
Spontaneous ignition:	
(Spontaneous combustibility or reactivity with water): No ignition at normal temperatures.	
Oxidizability	: Stable at normal temperatures
Self-reactivity /explosivity	: None
Stability/reactivity	: Stable in normal storage and handling

Hazard identification of Polyvinylchloride alone; Data on this sheet is not available as it is formed in sheet form by adding several additives to the chlorinated PVC.

11. Toxicological information

Skin irritant properties	: No knowledge
Corrosive properties (skin and eyes)	: No knowledge
Allergenic and sensitizing effects	: No knowledge
Acute toxicity	: No knowledge
Sub-chronic toxicity	: No knowledge
Chronic toxicity	: No knowledge
Carcinogenic effects	: No knowledge
Mutagenic effects	: No knowledge
Effects on the reproductive system	: No knowledge
Teratogenic effects	: No knowledge

12. Ecological information

Biodegradability	: None
Bioaccumulation	: None

Fish toxicity : None

Other information on eco-toxicity : None

13. Caution upon disposal

Incinerate with an incinerator equipped with waste gas treatment facility. Dispose of by land-fill as non-hazardous waste. Dispose of residue and ash by land-fill as non-hazardous material, too.

14. Caution upon transportation

Care should be taken to prevent the cargo from breaking loose and breaking the packing bag or box. Avoid direct sunshine, moisture, sudden temperature changes.

15. Applicable law

The Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof :
Class I Designated Chemical Substances (Organic tin compounds)

16. Utilization of above information

The above description has been prepared based on the latest data available. But, the physical properties, hazardous and toxicological information are not guarantee data. The cautions are mentioned for the case of normal handing. In the case of special handling, please apply safety precaution in consideration of application and method of using.

MATERIAL SAFETY DATA SHEET

1. Manufacturer Information:

Product name : VINYFOIL C-8195
Company : Mitsubishi Plastics, Inc.
Address : Mitsubishi Jushi Bldg., 1-2-2 Nihonbashihongokucho,
Chuo-ku, Tokyo 103-0021, Japan
Department in charge : Electronics & Industrial Film Department
Tel. : +81-3- 3279-3042
Fax. : +81-3-3279-6677
Mail address : mpi7041@cc.mpi.co.jp
Emergency phone No. : +81-3- 3279-3042
Recommended and restriction in use : Cards

Serial No. 727-005

Revision : July 30, 2010

2. Summary of hazardous and toxicity

Name of classification : Not applicable
Physical and chemical hazards : Not applicable
Adverse human health effects : Not applicable
Ecological effect : Not applicable

As toxic gas (content:HCl,CO₂,CO) will form upon combustion, ventilate the area and wear protective equipment (breathing apparatus).

3. Composition and ingredient

Single or mixture : Mixture
Chemical name : Polyvinyl chloride, polymer additives, stabilizer etc.
Official gazette serial No. (Chemical Substance Control Law):
Polyvinyl chloride (6)-66
Official gazette serial No. (Workers' safety and Health Law) :
Organic tin compounds (Serial No. 322)

Ingredient & content:

Ingredient:	Content	CAS No.
Polyvinyl chloride	85%	9002-86-2
polymer additives, stabilizer etc.	15%	

Chemical formula : Polyvinyl chloride (CH₂CHCD)_n

4. First aid measures:

Eye contact	: Immediately wash with plenty of fresh water as it is likely to cause injury. If abnormal feeling occurs, ask for medical help.
Skin contact	: Not required
Ingestion	: Try to get the victim to vomit. If abnormal feeling occurs, ask for medical help.
Inhalation	: Remove the victim from the contamination immediately to fresh air. If cough and suffocation will be occurred, refer for medical attention.

5. Fire fighting

Extinguishing method	: Firefighters should wear proper protective equipment.
Extinguishing media	: Water, dry chemical, foam
Others	: As toxic gas (content: Cl, CO ₂ , CO) will form upon combustion,

6. Accidental release measures

Precaution to human being	: As this is a solid matter having certain shape, not applicable.
Precaution to environment	: Prevent the overflow product (such as cut dust) into river or outdoor causing adverse effect on the environment.

7. Caution upon handling and storage

Handling	: Don't hold a flame. Don't cover in plastic wrap directly for quality assurance. As packed product is heavy, wear proper protective equipment for legs, hands and lap.
Storage	: Avoiding direct sunshine and moisture, store in a well-ventilated location. Prevent cargo breaks loose.

8. Exposure protection measures

Concentration limit (Ministry of Labor standard)	: Not specified.
Allowable concentration	
Japan Industrial Hygiene	: Not specified.
ACGHI	: Not specified
Facilities measures	: .Not specified
Protection gears:	
Respiratory protection	: Not required
Protection glasses	: Not required
Protective gloves	: Not required

Protective clothes

: Not required

9. Physical & Chemical properties:

Appearance	: Solid (Sheets)
Vapor pressure	: None
Volatility	: None
Boiling point	: None
Density	: 1.4
Melting point	: None
Solubility (Water)	: Not soluble
Other	: Softening at 60°C

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Chronic toxicity	: No knowledge
Carcinogenic effects	: No knowledge
Mutagenic effects	: No knowledge
Effects on the reproductive system	: No knowledge
Teratogenic effects	: No knowledge

12. Ecological information

Biodegradability	: None
Bioaccumulation	: None

Fish toxicity : None

Other information on eco-toxicity : None

13. Caution upon disposal

Burn in a chemical incinerator equipped with a scrubber. Dump on the ground as non-hazardous waste. Residuals and ash as non-hazardous dump on the ground, too.

14. Caution upon transportation

Care should be taken to prevent the cargo from breaking loose and breaking the packing bag or box. Avoid direct sunshine, moisture, sudden temperature changes.

15. Applicable law

Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (PRTR Law)
Organic tin compounds : Class I Designated Chemical Substance, Cabinet Order No. 239

16. Utilization of above information

The above description has been prepared based on the latest data available. But, the physical properties, hazardous and toxicological information are not guarantee data. The cautions are mentioned for the case of normal handling. In the case of special handling, please apply safety precaution in consideration of application and method of using.
