



Material Safety Data Sheet (MSDS)

Version: 1.1
Language: en
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1. Chemical Product & Company Identification

1.1. **Product Name:** 4films standard matt thermal

1.2. **General Property:** Polypropylene / EVA Laminate

1.3. **Hazardous Class:** Not Applicable

1.4. **Application:**

1.5. **Supplier Identification:**

Address Office: 4films GmbH
Thüringer Straße 14
37269 Eschwege
Deutschland (GERMANY)
Phone: +49 5651 7494245
Fax: +49 5651 7494246

1.5. **Emergency telephone:**

Telephone: +49 (0) 30 19240
Giftnotruf Berlin, Berliner Betrieb für Zentrale Gesundheitliche Aufgaben, Institut für Toxikologie

2. Composition and Information on Ingredients

Chemical Name	CAS No.	RTECS No.	UN No.	Content (%)
Polypropylene Homopolymer	9003-07-0	-	-	38% over Min.
Polypropylene Copolymer	9010-79-1	-	-	5% under Max.
Polyethylene	9002-88-4 25087-34-7	-	-	8% under Max.
Ethylene Vinyl Acetate	24937-78-8	-	-	48% under Max.
Silica	112926-00-8	-	-	1% under Max.
Additive				



3. Hazards Identification

NFPA Rating

Health	Fire	Reactivity
1	1	1

3.1. Urgent Hazardous Information

Take notice of serious burnt by touch of molten product

3.2. Eye: Not Available

3.3. Skin: Not Available

3.4. Inhalation: Not Available

3.5. Ingestion: When you ingest it, you are stimulated in your digestive organs

3.6. Chronic symptoms: Not Available

4. First Aid Measures

4.1. Eye Contact

Flush eyes with a solution of salt immediately.
Take the medical measures immediately.

4.2. Skin Contact

In case of touch with molten product, immediately cure the affected area and take off contaminated clothes and shoes, and flush the affected area with a solution of soap or a cleanser, or large amount of water. Take the medical measures immediately.

4.3. Inhalation

No special treatment is necessary since this product is not likely to be hazardous by inhalation. If exposed to excessive levels of dust or fumes, remove the affected person to the fresh air as soon as possible. And in case that the affected person stop breathing, artificial respiration should be done with lifesaving instrument immediately. Take the medical advice from a doctor immediately.

4.4. Ingestion

In case that vomiting happens, lower the victim's head than his body and treat the optimal measures. Take the medical measures immediately.

4.5. Other Information

In case that there are some abnormal or strange symptoms, medical measures should be done immediately.
None is special antidote.



5. Fire-Fighting Measures

If the product is exposed to heat or flame, the fire may happen.

- 5.1. **Flash Point:** Not Available
- 5.2. **Auto Ignition Temperature:** Not Available
- 5.3. **Flammable Limits in Air:** Lower: Not Available
Upper: Not Available
- 5.4. **Regulation & Classification of Fire-fighting Method:**
Not Applicable
- 5.5. **Extinguish Media:** Use water fog, foam, water spray, dry chemical or CO₂
- 5.6. **Extinguish Method & Instrument**
Remove the product from fire areas if it can be done without risk. Do not scatter the product to spray high-pressure water directly. Make waterway of fire-control for later treatment.
Use the optimal extinguish agent according to the fire-condition. Avoid inhaling toxic gases and stand against the wind.
- 5.7. **Toxic Material of Combustion**
During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
- 5.8. **Forbidden Extinguish Agent:** Not Available

6. Accidental Release Measure

- 6.1. **Measure for Handling Personnel:**
Not Available
- 6.2. **Measure for Environmental Effect:**
Not Available
- 6.3. **Other Purifying Measure**
Sweep up for recycling and final disposal and keep in dry container. If material enters a sewer or waterway, notify responsible authorities of presence of non-toxic plastic product.

7. Handling and Storage

It is recommend that you comply all compliance to applicable laws and regulations governing proper method and regulation in case of storage.

- 7.1. **Safety Dealing Method:** Deal with combustible solid.
- 7.2. **Storage** Store the product far away from heat (the source of fire) & oxidizer.



8. Exposure Control/Personal Protection

- 8.1. Engineering Measure** Use ventilation to keep to airborne contaminants below the exposure limit.
- 8.2. Respiratory protection** For most condition no respiratory protection should be need, however, if process generate dust, fume or mist, set up the vent to keep to airborne contaminants below the exposure limit.
- 8.3. Eye protection** Not Available
- 8.4. Hand & Body protection** In case of dealing with hot & molten product, specific items such as gloves, boots, apron or full-body suits should be worn.
- 8.5. Hygienic Notice** Not Available
- 8.6. The exposure standard of workshop**
It has not established by OSHA, ACGIH or NIOSH

9. Physical & Chemical Properties

Appearance	Translucent or clear transparent
Odor	Odorless sheets of film
pH	Not Available
Solubility (in water)	Insoluble
Boiling Point /Boiling Point Range	Not Applicable
Melting Point /Melting Point Range	160 ~ 170° C
Explosion	Not Applicable
Oxidization	Not Available
Vapor Pressure	Not Available
Density	0.890 ~ 0.930
Distribution Coefficient	Not Available
Vapor Density	Not Available
Viscosity	Not Available
Molecular Weight	> 40,000



10. Stability & Reactivity

This product is considered a stable material under normal storage and handling.

10.1. Chemical Stability Stable at room temperature & normal atmospheric pressure

10.2. Material & Condition to Avoid

Condition to Avoid – Avoid touching strong oxidizer, over-heat, sparks and flame

Material to Avoid

Chlorine (Liquid)	Explosive Reactivity
Peroxide of Hydrogen	Hazard of Fire & Explosion
Nitric Acid (Fume)	Hazard of Fire & Explosion
strong oxidizer	Hazard of Fire & Explosion
Potassium Permanganate	Ignition

10.3. Hazardous Decomposition Product

By thermal decomposition, poisonous fume & toxic vapor may be formed.

10.4. Condition Contributing to Hazardous Polymerization

Not Available

11. Toxicological Information

11.1. Acute Oral Toxicity

LD50:	3,200 mg/kg, Oral-mouse
LD50:	1,450 mg/kg, Intraperitoneal-mouse
LD50:	> 110 mg/kg, Intraperitoneal-rat
LD50:	> 99 mg/kg, Intravenous-rat

11.2. Acute Inhalation Toxicity: Not Available

11.3. Sub-chronic Toxicity: Not Available

11.4. Unusual Chronic Toxicity: None Reported

11.5. Mutagenic Effects: Not Available

11.6. Genetical Effects: Not Available

11.7. Carcinogenic Effects It has not been reported about its harmfulness with regard to human & animal. (IARC G3)

11.8. Other Information: Not Available



12. Ecological Information

- 12.1. **Ecological/Aquatic Toxicity:** Not Available
- 12.2. **Agronomical Movement:** Not Available
- 12.3. **Bio-degradability:** Not Available
- 12.4. **Bio-accumulation:** Not Available

13. Disposal Consideration

13.1. Product Disposal

Sweep up spilled product and place in suitable container for recycle or disposal. Dispose of recovered material according to current regulation

13.2. General Comment

It is recommend that all waste be analyze for compliance to applicable laws and regulations governing proper waste disposal method and reporting regulation

14. Transport Information

14.1. Class & Regulation by Rule of Transportation & Storage of Dangerous Article

Not Applicable

14.2. Transport Consideration

Not Applicable

14.3. Class & Regulation by other Transport Regulation

D.O.T: Not Applicable
I.M.O: Not Applicable
ARD/RID
Hazard Classification: Not Applicable
ARD/RID Item Number: Not Applicable

15. Regulatory Information

15.1. OSHA, WHMIS, EPA Classification

Non-Hazardous

15.2. SARA Regulation Section 313(40 CFR part 372) & 29 CFR 1910.1200

this product is not considered hazardous.

16. Other Information

Information contained in this MSDS is the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. Vendor assumes no responsibility for injury to vendee or third person proximately caused by abnormal use of the product even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of the product.