




Safety Data Sheet



according to Regulation (EC) No 1907/2006
Revision date: 16.03.2023

-  4films resist wet
-  4films resist dry
-  4films resist digi

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

4films resist wet, 4films resist dry, 4films resist digi

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Plastic articles: Paper and board treatment products

1.3. Details of the supplier of the safety data sheet

Company name: 4films GmbH
Street: Westendhof 3
Place: D-45143 Essen
Information Telephone: +49 201 56 57 77 70
Information Telefax: +49 201 56 57 77 60
E-Mail (competent person): info@4-films.com
Website: www.4-films.com

1.4. Emergency telephone number

+49 (0) 30 19240

(Giftnotruf Berlin, Berliner Betrieb für Zentrale Gesundheitliche Aufgaben, Institut für Toxikologie)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

Classification according to Regulation (EC) No 1272/2008 [CLP]: not applicable / not relevant Plastic articles

2.2. Label elements

Additional advice on labelling

Labelling according to Regulation (EC) No. 1272/2008 [CLP]: not applicable / not relevant Plastic articles

There is no requirement for the product to be specially labelled according to EC directives or the corresponding national laws.

2.3. Other hazards

No information available.

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SECTION 3: Composition/information on ingredients

3.1. Mixtures

Chemical characterization
plastic: Polypropylene, Coatings

SECTION 4: First aid measures

4.1. Description of first aid measures

General information: When in doubt or if symptoms are observed, get medical advice.

After inhalation: Provide fresh air. If experiencing respiratory symptoms: Call a doctor.

After contact with skin: After contact with molten product, cool skin area rapidly with cold water. Burns caused by molten material must be treated clinically. In case of skin reactions, consult a physician.

After contact with eyes: Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

After ingestion: Never give anything by mouth to an unconscious person or a person with cramps.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water spray jet, Full water jet, alcohol resistant foam, Dry extinguishing powder, Carbon dioxide (CO₂).
Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

None

5.2. Special hazards arising from the substance or mixture

Non-flammable.

In case of fire may be liberated: Carbon dioxide (CO₂), Carbon monoxide (CO), Gases/vapours, toxic.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional Information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Do not breathe dust. Use personal protection equipment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling: Provide adequate ventilation. Avoid dust formation.

Do not breathe dust. Use personal protection equipment.

Advice on protection against fire and explosion: Usual measures for fire prevention.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

No special measures are necessary.

Hints on joint storage

Do not store together with: Oxidising agent, Reducing agent. Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Keep away from heat. storage temperature: 10 - 45 °C.

7.3. Specific end use(s)

Plastic articles: Paper and board treatment products

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

Protective and hygiene measures

Take off contaminated clothing. Draw up and observe skin protection programme.

Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff.

Do not breathe dust.



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Eye/face protection

Eye protection: not required.

Hand protection

Wear suitable gloves.

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	solid
Colour:	various
Odour:	odourless
pH-Value:	not applicable

Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	not determined
Flash point:	not determined

Flammability

Solid:	not applicable
Gas:	not applicable

Explosive properties

The product is not:	Explosive.
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Ignition temperature:	not determined

Auto-ignition temperature

Solid:	not applicable
Gas:	not applicable
Decomposition temperature:	not determined

Oxidizing properties

Not oxidising.	
Vapour pressure:	not determined
Density:	not determined
Water solubility:	practically insoluble

Solubility in other solvents

Partition coefficient:	not determined
Viscosity / dynamic:	not applicable
Viscosity / kinematic:	not applicable
Vapour density:	not determined
Evaporation rate:	not determined

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9.2. Other information

Odour threshold: not applicable.

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from heat.

10.5. Incompatible materials

Oxidising agent, Reducing agent.

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon dioxide (CO₂), Carbon monoxide (CO), Gases/vapours, toxic.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Additional information on tests

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

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SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation.

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

List of Wastes Code - residues/unused products

200139 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); Plastics

List of Wastes Code - used product

200139 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); Plastics

List of Wastes Code - contaminated packaging

200139 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); Plastics

Contaminated packaging

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

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SECTION 14: Transport information

Land transport (ADR/RID)

- 14.1 UN number:** No dangerous good in sense of this transport regulation.
14.2 UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3 Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4 Packing group: No dangerous good in sense of this transport regulation.

Inland waterway transport (ADN)

- 14.1 UN number:** No dangerous good in sense of this transport regulation.
14.2 UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3 Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4 Packing group: No dangerous good in sense of this transport regulation.

Marine transport (IMGD)

- 14.1 UN number:** No dangerous good in sense of this transport regulation.
14.2 UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3 Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4 Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

- 14.1 UN number:** No dangerous good in sense of this transport regulation.
14.2 UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3 Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4 Packing group: No dangerous good in sense of this transport regulation.

14.5 Environmental hazards

Environmentally hazardous: No

14.6 Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

Additional information

Classification according to Regulation (EC) No 1272/2008 [CLP]: not applicable / not relevant Plastic articles
Labelling according to Regulation (EC) No. 1272/2008 [CLP]: not applicable / not relevant Plastic articles
There is no requirement for the product to be specially labelled according to EC directives or the corresponding national laws.

National regulatory information

Water contaminating class (D): - - non-hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

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SECTION 16: Other information

Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals UN:
United Nations

CAS: Chemical Abstracts Service

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

LL50: Lethal loading, 50%

EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate

NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic

vPvB: very persistent, very bioaccumulative

MARPOL: International Convention for the Prevention of Marine Pollution from Ships IBC: Intermediate Bulk Container

VOC: Volatile Organic Compounds

SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)