## SAFETY DATA SHEET

**Cast Polypropylene (CPP)**

### 1.0 IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

#### 1.1 Product identifier:

<table>
<thead>
<tr>
<th>REACH Registration Number</th>
<th>Name of substance</th>
<th>CAS</th>
<th>EC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Polypropylene</td>
<td>9003-07-0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>aluminium</td>
<td>7429-90-5</td>
<td>Not available</td>
</tr>
<tr>
<td>Trade Name:</td>
<td>FLEXCPP™ &amp; FLEXMETPROTECT™</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Substances Name:
Polypropylene and its Copolymer/Terpolymer/Aluminum metalized.

#### Synonym:
Cast Polypropylene

#### Chemical classification:
Polyolefin

#### Chemical Formula:
Propene Homo polymer, (C3H6)n- (min.90%)

#### Structural Formula:

![Structural Formula](Image)

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

**Relevant identified uses:**
- Flexible packaging application.
- Decorative application.
- Industrial application.
- Food packaging.

### Manufacturing Sites:

1) India: UFLEX LIMITED (Film Business), A-1, Sector-60, NOIDA - 201 301, U.P. INDIA., Tel: +91 (120) 4002121, 3982121, Fax: +91 (120) 2580511, 2580003, E-Mail: enquiry@flexfilm.com

2) Egypt: FLEX P. FILMS (EGYPT) S.A.E, Plot no. R2 in Engineering Square (e2), Plot no. 3 in North Extension of Industrial Zone., 6 October City., Arab Republic of Egypt, Tel: +202 38283000, Fax: +202 38283050, E-Mail: enquiry@flexfilm.com
• Building protection.
• Cosmetic packaging.

Uses advised against: No data available.

1.3 Details of the Supplier of the Safety Data Sheet

Manufacturer/Supplier | UFLEX LIMITED
Street address/P.O. Box | A-1, SECTOR-60, NOIDA – 201301
Country ID/Postcode/Place | (U.P), INDIA
Telephone number (if possible, indicate telefax) | +91 120-3982121, 3982535, 3982658
Fax: | +91 120-2580152, 2580511, 2580003
Email ID | sudhir.naik@flexfilm.com
web site: | www.flexfilm.com
National contact: | Mob. No. +91-9910800298
Phone | +91-120-3982-705

1.4 Emergency telephone number

· Only available during office hours. | +91 120-3982121, 3982535, 3982658

2.0 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture to CLP

2.1.1. Classification according to Regulation (EC) No 1272/2008 (CLP/GHS)

Not a dangerous substance according to GHS.
This substance is not classified as dangerous according to Directive 67/548/EEC.

2.1.2. Classification according to Directive 67/548/EEC (DSD)

This substance is not classified as dangerous according to Directive 67/548/EEC.

2.1.3 Additional information: No data available.

2.2. Label elements (CLP only) Labeling according to Regulation (EC) No 1272/2008 (CLP/GHS)

Classification and labeling according to EU Regulation (EC) 1272/2008 (CLP Regulation) and
Globally Harmonized System (GHS):

Label elements

| GHS Pictogram | no labelling required (no dangerous properties) |
| Signal Word | No signal word |
| Hazard Statement | no classification required (no dangerous properties) |
| Precautionary Statement prevention | P280: Wear protective gloves/protective clothing/eye protection/face protection |

Manufacturing Sites:

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Precautionary Statement Storage

P261: Avoid breathing dust/fume/gas/mist/vapours/spray
P262: Do not get in eyes, on skin, or on clothing
P402+404: Store in a dry place. Store in a closed container

2.3. Other hazards Substance meets the criteria for PBT OR vPvB according to Regulation (EC) 1907/2006, Annex XIII
None

3.0 COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS No And EC No</th>
<th>% Purity</th>
<th>Classification according to Regulation (EC) No 1278/2008 (CLP).</th>
</tr>
</thead>
<tbody>
<tr>
<td>9003-07-0</td>
<td>&gt; 99.0%</td>
<td>no classification required (no dangerous properties)</td>
</tr>
<tr>
<td>7429-90-5</td>
<td>&lt; 0.1%</td>
<td>no classification required as concentration is less than 0.1 %</td>
</tr>
</tbody>
</table>

4.0 FIRST AID MEASURES

4.1. Description of first aid measures

General notes
Observe good industrial hygiene practices.

Eye contact
Exposure to hot molten material. In this case: Rinse with plenty of water. Seek immediate special treatment at hospital or medical center in case of irritation caused by vapours or fumes wash with water and seek medical advice.

Skin Contact
Exposure to hot molten material. In this case: Rinse with plenty of water. Do NOT remove clothing (risk of sticking to skin) or do not try removing adhering material. Injured area should be treated as burns. Seek medical advice immediately. However, use of protective gloves/clothing is good industrial practice

Inhalation
Fumes and vapours produced by heated or burnt material may be irritating for the reperatory track. Bring patient into fresh air; get medical advice if the symptoms continue.

Ingestion

4.2. Most important symptoms and effects, both acute and delayed
No data available.

4.3. Indication of any immediate medical attention and special treatment needed
No specific advice. Treat according to symptoms present.

5.0 FIRE-FIGHTING MEASURES

5.1. Extinguishing media:

Suitable extinguishing media: Water mist only to cool the surface exposed to fire, carbon dioxide, foam, Halon, AFFF(Aqueous film forming foam)

Unsuitable extinguishing media: Do not use water jets for extinguishing fire, since they could help to spread the flames.
5.2. Special hazards arising from the substance or mixture

Hazardous combustion products:
- Complete combustion with excess of oxygen foams: s carbon dioxide and water vapour.
- Incomplete combustion gives, in addition, carbon monoxide, and vapor.

5.3. Advice for fire-fighters

Stop the fire spreading, call the Fire brigade immediately, evacuate non-essential personal. Protective clothing’s, goggles and self contained breathing equipment should be made available for fireman.

Other information

Special Remarks on Fire Hazards | Wear suitable Self-contained breathing equipment in case of risk of exposure to vapors or fumes.
--- | ---

6.0 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Protective equipment:
Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment.

6.1.2 For emergency responders

Remove ignition sources from the powdered grades. Keep away from heat or flame. Sweep up with a minimum of dusting. Collect in container, e.g. fiberboard drum or carton.

6.2 Environmental precautions:
Keep out of drains and water sources.

6.3 Methods and material for containment and cleaning up

6.3.1 For containment:
Avoid dust formation. Collect dust using a vacuum cleaner equipped with HEPA filter. If not possible, gently moisten dust with water fog before it is collected with shovel, broom or the like. Flush area with water.

6.3.2 For cleaning up:
Pick up mechanically. Dispose according to local and National regulations. Refer 8 and 13 regarding slippery behavior of PP film on floor.

6.3.3 Other Information:
No data available.

6.4 Reference to other sections:
None

Manufacturing Sites:

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7.0 HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures:

- Keep away from ignition sources.
- Observe the general rules of industrial fire protection.
- Keep the film at room temp. 24hrs.prior to processing.
- Keep original wrapping on the film until it is used. In case the roll is partially used, the balance roll should be preserved on the standard packing with sticker.
- Film rolls should be moved only with equipment designed for the purpose as film rolls and pallets are heavy. Film edges are sharp and may cause cuts/wounds, handle with most care.
- In most of the processes where there is a movement of film over metal roller, Static electrical charges develop on the film, which may provide source of ignition to flammable vapors and gases or may give static shock to operator. Avoid static buildup.

Measures to prevent fire:

Keep away from sources of ignition - No smoking. Store in a cool, dry place out of direct sunlight. Ground container and transfer equipment to eliminate static electric sparks. Store away from incompatible materials.

Measures to prevent aerosol and dust generation:

No data available.

Measures to protect the environment:

Keep out of drains and water sources.

Advice on general occupational hygiene:

- ADEQUATE PERSONAL PROTECTIVE EQUIPMENT INCLUDING GLOVES, IMPERVIOUS SLEEVES & APRONS & EYE & FACE SHIELDS SHOULD BE PROVIDED.
- WHERE WORKERS REQUIRED TO ENTER CONFINED SPACES & TANKS THAT HAVE CONTAINED OLEFIN OR OTHER AREAS WHERE OXYGEN CONTENT MAY BE LESS THAN 16%/ AN OXYGEN-CARBON DIOXIDE...SUPPLY SHOULD BE AVAIL AT WORKPLACE FOR RESUSCITATION.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

- Does not require special storage conditions. It is recommended to store below 30 °C in order to avoid any deterioration of the film surface properties.
- Use both the films by FIFO system & it is advised to rotate the film stock.
- Shelf life: 3 months for bare film (FLEXCPP™) and metallized film (FLEXMETPROTECT™) from the date of dispatch.

Packaging materials:

Keep packages closed to prevent contamination.

Requirements for storage rooms and vessels:

Same as mentioned above.
7.3. Specific end use(s)

Same as mentioned in section 1.2

<table>
<thead>
<tr>
<th>8.0 EXPOSURE CONTROLS/PERSONAL PROTECTION</th>
</tr>
</thead>
</table>

8.1 Control parameters

No data available.

8.2 Exposure controls

- Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
- Standard usage condition of material does not generate the dust particles.

**8.2.1. Occupational Exposure controls**

Standard usage condition of material does not generate the dust particles.

**8.2.2 Personal protection equipment:**

If contact with hot molten material is possible, wear heat insulating and chemical proof gloves and clothes and face shield and goggles for eyes.

**8.2.2.1 Eye and face protection:**

Normal eye protection practices should be used. If dusty conditions exist, chemical goggles are recommended.

**8.2.2.2 Skin protection:**

If contact with hot molten material is possible, wear heat insulating and chemical proof gloves and clothes and face shield and goggles for eyes.

**Hand protection:**

No protection is ordinarily required under normal conditions of use. It is a good industrial hygiene practice to minimize skin contact.

**Other skin protection:**

Slabs of film on the floor can be slippery. Exercise due care in areas where slippage can occur.

**8.2.2.3 Respiratory protection:**

In case of risk of exposure to dust, vapour or fumes generated by thermal decomposition of the material, it is recommended that a local exhaust system is placed above the converting equipment (hood) and the working area must be properly ventilated.

**8.2.2.4 Thermal hazards:**

The material is combustible if exposed to flames; handling of material may create electrical charges and spark which may be cause of ignition for other flammable material.

**8.2.3 Environmental exposure controls:**

Environmental manager must be informed of all major spillages.

9.0 PHYSICAL AND CHEMICAL PROPERTIES
# Flex Film

## SAFETY DATA SHEET

### 9.1 General Information

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Plastic Film (Solid)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Transparent, Translucent, Opaque, Pearl</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
</tbody>
</table>

### 9.2 Important health, safety and environmental information

<table>
<thead>
<tr>
<th>pH (1% soln/water)</th>
<th>No data available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular Weight</td>
<td>No data available.</td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>No data available.</td>
</tr>
<tr>
<td>Melting point</td>
<td>160 - 165 °C.</td>
</tr>
<tr>
<td>Density</td>
<td>0.9 - 0.95 gm/cm³</td>
</tr>
<tr>
<td>Flash point</td>
<td>350°C</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Auto ignition point</td>
<td>&gt;380°C</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in common organic solvents.</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Practically insoluble.</td>
</tr>
</tbody>
</table>

### 9.3 Other information

| Std. enthalpy of formation $\Delta_f H_{298}$ | No data available. |
| Standard molar antropy $S_{298}$           | No data available. |

### 10. STABILITY AND REACTIVITY

#### 10.1 Reactivity

Stable under normal conditions of use up to 45°C.

#### 10.2 Chemical stability

No data available.

#### 10.3 Possibility of hazardous reactions

No hazardous reactions known under normal atmospheric conditions.

#### 10.4 Conditions to avoid

Do not heat to temperature exceeding 235 deg. C

#### 10.5 Incompatible materials

No data available.

#### 10.6 Hazardous decomposition products

No data available.

---

**Manufacturing Sites:**

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11 TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute effects (acute toxicity, irritation and corrosivity) Acute Toxicity

Skin corrosion/irritation: The contact with hot molten material may cause severe burns.

Serious eye damage/irritation: No data available.

Respiratory or skin sensitization: No data available.

Germ cell mutagenicity: No data available.

Summary of evaluation of the CMR properties: No data are available in humans. Inadequate evidence of carcinogenicity in animals. OVERALL EVALUATION: Group 3: The agent is not classifiable as to its carcinogenicity to humans.

Mutagenic Effects: No data available.

Carcinogenicity: No data available.

Reprotoxic Effects: No data available.

Other Toxic Effects on Humans:

- Inhalation: If heated to 235 °C, the product may form vapors or fumes which may cause irritation to the respiratory tract.

- Eyes: If heated to 235 °C, the product may form vapors or fumes which may cause irritation to the eyes.

- Ingestion: Material is biologically inert.

- Chronic toxicity: Data lacking.

NIOSH Immediately Dangerous To Life or Health Concentration (IDLH):

- Data lacking.

Specific target organ toxicity (single exposure):

- Data lacking.

Specific target organ toxicity (repeated exposure):

- No data available.

Aspiration hazard

11.1.188 Acute Toxicity:

- Method: Data lacking.

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

12.1.1 Acute aquatic toxicity (With M factor)

<table>
<thead>
<tr>
<th>Method</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data lacking</td>
<td></td>
</tr>
</tbody>
</table>

Manufacturing Sites:

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12.1.2. Chronic aquatic toxicity: freshwater
Data lacking.

12.1.3. Chronic aquatic toxicity: marine waters
Data lacking.

12.1.4. Sediment toxicity
Data lacking.

12.1.5. Soil toxicity
Data lacking.

12.1.6. Toxicity to micro-organisms in STP
Data lacking.

12.2 Persistence and degradability
Non biodegradable, non compostable

12.3 Bioaccumulative potential
Data lacking.

12.4 Mobility in soil
Data lacking.

12.5 Results of PBT and vPvB assessment
Data lacking.

12.6 Other adverse effects
Data lacking.

12.7 Additional information
There is no bioconcentration because of the relatively high molecular weight (MW > 1000). In the terrestrial
environment, material is expected to remain in the soil. In the aquatic environment, material is expected to float.

13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

13.1.1 Product / Packaging disposal:

Waste codes / waste designations according to LoW:
- Pick up film to avoid a slipping hazard.

13.1.2 Waste treatment-relevant information:
- Pick up film to avoid a slipping hazard.

13.1.3 Sewage disposal-relevant information:
- Dispose in accordance with local regulations, landfill is preferred. Forced draft incineration is an alternate or recycling

13.1.4 Other disposal recommendations:
- Dispose in accordance with local regulations, landfill is preferred. Forced draft incineration is an alternate or recycling

14 TRANSPORT INFORMATION

Manufacturing Sites: 

1) India: UFLEX LIMITED (Film Business), A-1, Sector-60, NOIDA - 201 301, U.P. INDIA., Tel: +91 (120) 4002121, 3982121, Fax: +91 (120) 2580511, 2580003, E-Mail: enquiry@flexfilm.com

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Flex Film

SAFETY DATA SHEET

14.1. UN number

Not restricted

14.2. UN proper shipping name

Not restricted

14.3. Transport hazard class (as)

Not restricted

14.4. Packing group

Not restricted

14.5. Environmental hazards

Not restricted

15 REGULATORY INFORMATION

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

EU regulations: This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006 and CLP regulation.

Authorisations and/or restrictions on use: None

Authorisations: None

Restrictions on use: None

Other regulations: Not a dangerous substance according to GHS as the substance is not intended to be released from article.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has been carried out for the substance or the mixture by the supplier.(LR) - No

16 OTHER INFORMATION

Technical Advice

Use data given in this Safety Data Sheet and make an inventory list of all chemicals used in the factory.

Create a Register for Workplace Chemicals.

Set priorities concerning the safety in the organization.

Create emergency plans for the assessed hazards.

Organize occupational health care and regular surveys as necessary.

Organize contacts with authorities/laboratories to create a monitoring system for chemical hazards, and to reliably measure and/or estimate occupational exposures to chemicals when needed.

Start collecting case studies of accidents and sickness records in the enterprise to create a basis for priority measures in the control of hazards.

Involve workers in safety organizations, such as the system of Safety Representatives and Committees.

Do regular inspection using checklists made for the particular chemicals and chemical processes in use.

Mark and label all chemicals.

Keep at hand an inventory list of all chemicals handled in the place of work together with a collection of Chemical Safety Data Sheets for these chemicals;

Train workers to read and understand the Chemical Safety Information, including the health hazards and routes of exposure; train them to handle dangerous chemicals and processes with respect.

Plan, develop and choose the safe working procedures.

Manufacturing Sites:

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Reduce the number of people coming into contact with dangerous chemicals.

Reduce the length of time and/or frequency of exposure of workers to dangerous chemicals.

Train workers to know and understand the emergency procedures.

Equip and train workers to use personal protective equipment properly after everything possible has been done to eliminate hazards by means of other methods.

**Abbreviations and acronyms:**

- DNEL: Derived No-Effect Level.
- PNEC: Predicted No-Effect Concentration.
- PBT: Persistent, bioaccumulative and toxic.
- vPvB: Very Persistent and very Bioaccumulative.
- DSD: Directive 67/548/EEC.

**Key literature references and sources for data**

- OECD
- ECHA
- HSDB® - Hazardous Substances Data Bank
- Registry of Toxic Effects of Chemical Substances (RTECS)

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:**

Not a dangerous substance according to GHS as the substance is not intended to be released from article.

**Relevant R-phrases and/or H-statements (number and full text):**

This substance is not classified as dangerous according to Directive 67/548/EEC.

**Further information:**

**Created By:**

**ELC GROUP**

momaja s.r.o.

Krakovska 9, Prague 1, 110 00

Czech Republic Tel. +420 22 491 0000

Fax. +420 22 491 0671

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