Nomenclature

Structure
The commercial products under the name of LOXIAMID® are generally based on the scheme below:

<table>
<thead>
<tr>
<th>LOXIM® BRAND</th>
<th>Po. 1</th>
<th>Po. 2</th>
<th>Po. 3</th>
<th>Po. 4</th>
<th>Po. 5</th>
<th>Po. 6</th>
<th>Po. 7</th>
<th>Po. 8</th>
<th>Po. 9</th>
<th>Po. 10</th>
<th>Po. 11</th>
</tr>
</thead>
</table>

The LOXIM® BRAND product portfolio consists of:

![Product Portfolio Diagram]

**PRODUCT IDENTIFICATION**

The product identification is made of positions 1 to 7, consisting of a series of alphanumeric characters which illustrate the polymer type, the stabilisation, reinforcement, filler type and its content, and any special features. The following example outlines the classification scheme used by LOXIM:
## POSITION 1 – POLYMER TYPES

Indicates the type of polymer.

### LOXISTER
- **PBT**
  - Polybutylene Terephthalate
- **PBT/PC**
  - Polybutylene Terephthalate / Polycarbonate
- **PBT/PET**
  - Polybutylene Terephthalate / Polyethylene Terephthalate
- **PC/PBT**
  - Polycarbonate / Polybutylene Terephthalate
- **PC/PET**
  - Polycarbonate / Polyethylene Terephthalate

### LOXILINE
- **PP CP**
  - Polypropylene Co-polymer
- **PP HP**
  - Polypropylene Homo-polymer

### LOXIRENE
- **ABS**
  - Acrylonitrile Butadiene Styrene
- **ABS/PC**
  - Acrylonitrile Butadiene Styrene / Polycarbonate
- **ABS/PMMA**
  - Acrylonitrile Butadiene Styrene / Poly (Methyl Methacrylate)
- **ASA/PC**
  - Acrylonitrile Styrene Acrylate / Polycarbonate
- **PPE/HIPS**
  - Polyphenylene Ether / High Impact Polystyrene
- **SAN**
  - Styrene Acrylonitrile

### LOXIAMID
- **ASA/PA6**
  - Acrylonitrile Styrene Acrylate / Polamide 6
- **PA 6**
  - Polamide 6
- **PA 66**
  - Polamide 66
- **PA6/ABS**
  - Polamide 6 / Acrylonitrile Butadiene Styrene

### LOXICARB
- **PC**
  - Polycarbonate

### LOXILLOY
- **PC/ABS**
  - Polycarbonate / Acrylonitrile Butadiene Styrene

### LOXISTAL
- **POM/PE**
  - Polyoxymethylene/ Polyethylene
- **POM/PTFE**
  - Polyoxymethylene/Polytetrafluoroethylene

## POSITION 2 – FLAME RETARDANT

Based on the flammability rating, the products are listed as*:

- **FRV0**
  - With V0 Flammability Rating
- **FRV1**
  - With V1 Flammability Rating
- **FRV2**
  - With V2 Flammability Rating
- **FRV0HF**
  - Halogen Free with V0 Flammability Rating
- **FRV1HF**
  - Halogen Free with V1 Flammability Rating
- **FRV2HF**
  - Halogen Free with V2 Flammability Rating

* - The product is categorised under HB as the flammability rating if the above is not mentioned.

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* All LOXILLOY and LOXIRENE blends have a special consideration and are designated in their respective series. Their special categorisation is mentioned in the following page.
POSITION 3 – FILLER TYPE

This position defines the type of filler in the polymer grade. The following reinforcements or fillers are generally used:

- CF: Carbon Fibre
- GB: Glass Beads
- GF: Glass Fibre
- GFCC: Glass Fibre Chemically Coupled
- MR: Mineral
- TA: Talc

POSITION 4 – FILLER CONTENT

Key numbers describing the percentage content of reinforcing agents/fillers or modifiers. Example:

- GF20: 20% glass fibre reinforced
- GF20MR10: 20% glass fibre and 10% mineral filled
- TA10: 10% talc reinforced

POSITION 5 TO 7 – SPECIAL STABILISATION FEATURES

List of characters used to identify special stabilisation properties are arranged in a following general scheme:

POSITION 5 - HEAT STABILISATION (For Semi-Crystalline Grades)

<table>
<thead>
<tr>
<th>Position</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS1</td>
<td>Improved resistance to heat aging, hot water and weather.</td>
</tr>
<tr>
<td></td>
<td>Electrical properties are uninfluenced.</td>
</tr>
<tr>
<td></td>
<td>Compound natural colour – Light Beige</td>
</tr>
<tr>
<td></td>
<td>Compound colour available upon request</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Position</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS2</td>
<td>Highest resistance to heat aging, hot water, oil, grease, water/glycol and weather.</td>
</tr>
<tr>
<td></td>
<td>Electrical properties are uninfluenced.</td>
</tr>
<tr>
<td></td>
<td>For engineering applications only.</td>
</tr>
<tr>
<td></td>
<td>Compound natural colour – Beige to Brown</td>
</tr>
<tr>
<td></td>
<td>Compound colour available in natural and black colour</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Position</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS3</td>
<td>High resistance to heat aging and weather.</td>
</tr>
<tr>
<td></td>
<td>Less suited for electrical applications.</td>
</tr>
<tr>
<td></td>
<td>For engineering applications only</td>
</tr>
<tr>
<td></td>
<td>Compound natural colour – Light Greenish</td>
</tr>
<tr>
<td></td>
<td>Compound colour available in natural and black colour</td>
</tr>
</tbody>
</table>

POSITION 5 – FLOWABILITY (For Amorphous Grades)

<table>
<thead>
<tr>
<th>Position</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MF1</td>
<td>Moderate Flow Characteristics</td>
</tr>
<tr>
<td>MF2</td>
<td>Medium Flow Characteristics</td>
</tr>
<tr>
<td>MF3</td>
<td>High Flow Characteristics</td>
</tr>
</tbody>
</table>

*All LOXILLOY and LOXIRENE blends have a special consideration and are designated in their respective series. Their special categorisation is mentioned in the following page.*
**SPECIAL CONSIDERATION FOR LOXILLOY and LOXIRENE Grades** - See Footnote

**POSITION 6 – HYDROLYSIS RESISTANCE**
(Only for PA66 in combination with heat stabilisation)
- HR1: High hydrolysis and heat aging resistance.
- HR2: Highest hydrolysis and heat aging resistance.

**POSITION 7 - UV STABILISATION**
- UV1: Moderate Stabilisation
- UV2: Intermediate Stabilisation
- UV3: High Stabilisation

**SPECIAL CONSIDERATION FOR POLYPROPYLENE**
- PP: PP Homopolymer + PP Copolymer
- PPH: PP Homopolymer
- PPC: PP Block Copolymer
- PPR: PP Random Copolymer

**POSITION 8 – SUFFIXES**
Used optionally, suffixes are used to identify specific processing or application-related properties. The modifications and fillers used are listed below.

<table>
<thead>
<tr>
<th>Filler</th>
<th>Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR</td>
<td>Anti-Microbial</td>
</tr>
<tr>
<td>BS</td>
<td>Barium Sulphate</td>
</tr>
<tr>
<td>MOS</td>
<td>Molybdenum Disulphide</td>
</tr>
<tr>
<td>PTFE</td>
<td>Polytetrafluoroethylene</td>
</tr>
</tbody>
</table>

**POSITION 9 TO 10 – COLOUR CODE**
The colour code is generally composed of the colour name, followed by a polymer code and lastly the colour number.

**Examples**
- BK0305: Black Colour – Colour Shade 5
- NC0301: Natural Colour
- RE0301: Red Colour – Colour Shade 1

**A list of available colours are:**
- BG: Beige Grey
- BK: Black
- BL: Blue
- BR: Brown
- GR: Green
- GY: Grey
- NC: Natural
- OR: Orange
- RE: Red
- SL: Silver
- VI: Violet
- WI: White
- YL: Yellow

**POSITION 11 – FORMULATION NUMBER**
The colour code is followed by a 5digit formulation number.

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* - All LOXILLOY and LOXIRENE blends have a special consideration and are designated in their respective series. Their special categorisation is mentioned in the following page.
LOXILLOY PC/ABS 1125-20 UV1 IM3 NC0501 05003

# Position 1 to 11 If Applicable

LOXILLOY

1000-Series
- Standard Grades

For Position 2
Unfilled grade VSP mentioned
Filled grade HDT mentioned

2000-Series
- Easy Flowing Grades
- High Gloss Grades

3000-Series
- Chrome Plating Grades
- Impact Modified Grades

4000-Series
- Glass Reinforced Grades
- Carbon Fiber Reinforced Grades

5000-Series
- FR Grades
  1. Halogenated Grades
  2. Non-Halogenated Grades

LOXIRENE

6000-Series (ABS/PC)
- Standard Grades
- Easy Flowing Grades
- Light Reflecting Grades

7000-Series (PC/ASA)
- Standard Grades
- Easy Flowing Grades

* - All LOXILLOY and LOXIRENE blends have a special consideration and are designated in their respective series. Their special categorisation is mentioned in the following page.