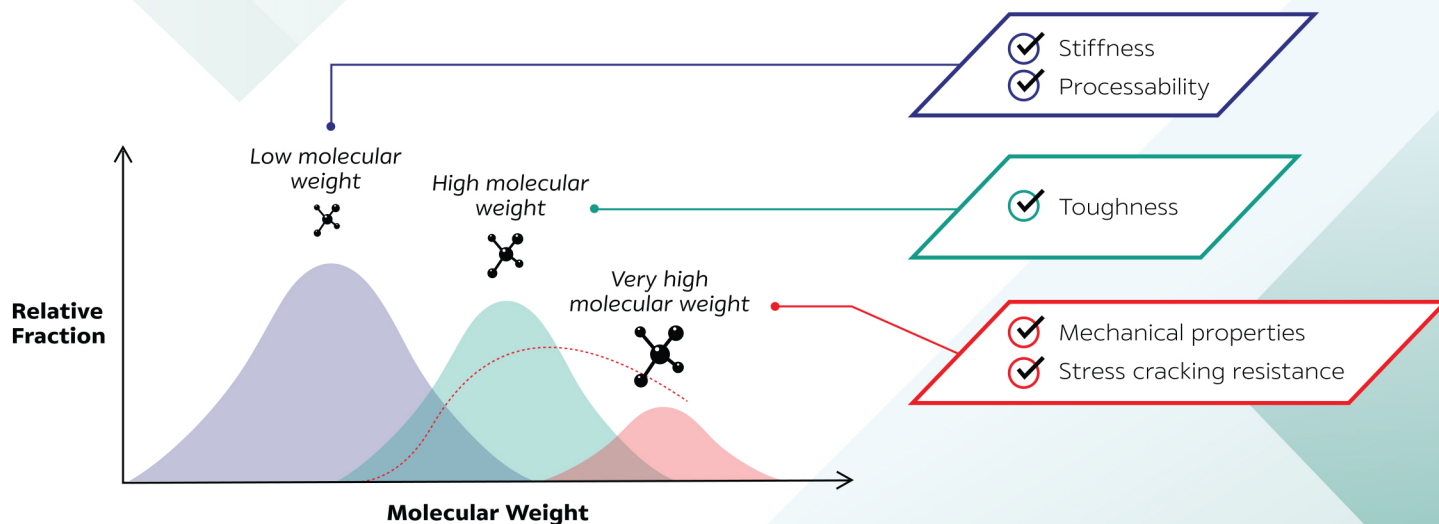


# High Performance HDPE Resins by SMX™ Technology



SCGC's breakthrough and patented Multi-Modal SMX™ Technology helps strengthen HDPE resins through perfect balance between high strength and stiffness properties to enhance end products durability, resulted in ability to reduce wall thickness while maintain functional properties. These properties can not only save material in product but also give lighter weight product that release less CO<sub>2</sub>.

With our superior technology, SCGC innovates wide range of product including blow molding and film application.



## S111F High Impact Film for Industrial Use



**25% better dart drop impact\***

### Recommended Applications

- Heavy duty industrial bag
- Chilled chicken & meat bag
- Industrial liner
- Construction film



**25% better puncture resistance\***

### Product Characteristics

- Up to 20% film thickness reduction
- Excellent impact strength and toughness
- Ability to maintain seal strength as HDPE & LLDPE formulation



**Up to 30% film thickness reduction\***



**19% GHG Reduction\*\***

Remarks:

\*Compared to conventional grade

\*\*Green House Gas reduction calculation guideline by Thailand Green House Gas Management Organization and based on film thickness reduction 20%

## S199F HDPE Film for Consumer Use



**20% better dart drop impact\***

### Recommended Applications

- Shopping bag
- Roll bag
- Trash bag
- PE-gloves
- Thin film with thickness < 20 microns



**Up to 20% higher impact strength\***

### Product Characteristics

- Excellent dart impact strength
- Good tensile strength and stiffness
- Good bubble stability
- Low gel content
- Good moisture barrier
- Food contact applicable
- Able to be blended with >30% recycled content while maintaining mechanical properties



**>30% blended with recycled content**



**Excellent processability**



**>16% GHG Reduction\*\***

Remarks:

\* Compared to conventional grade, both produced at SCGC lab with film thickness 12 microns and BUR 5:1

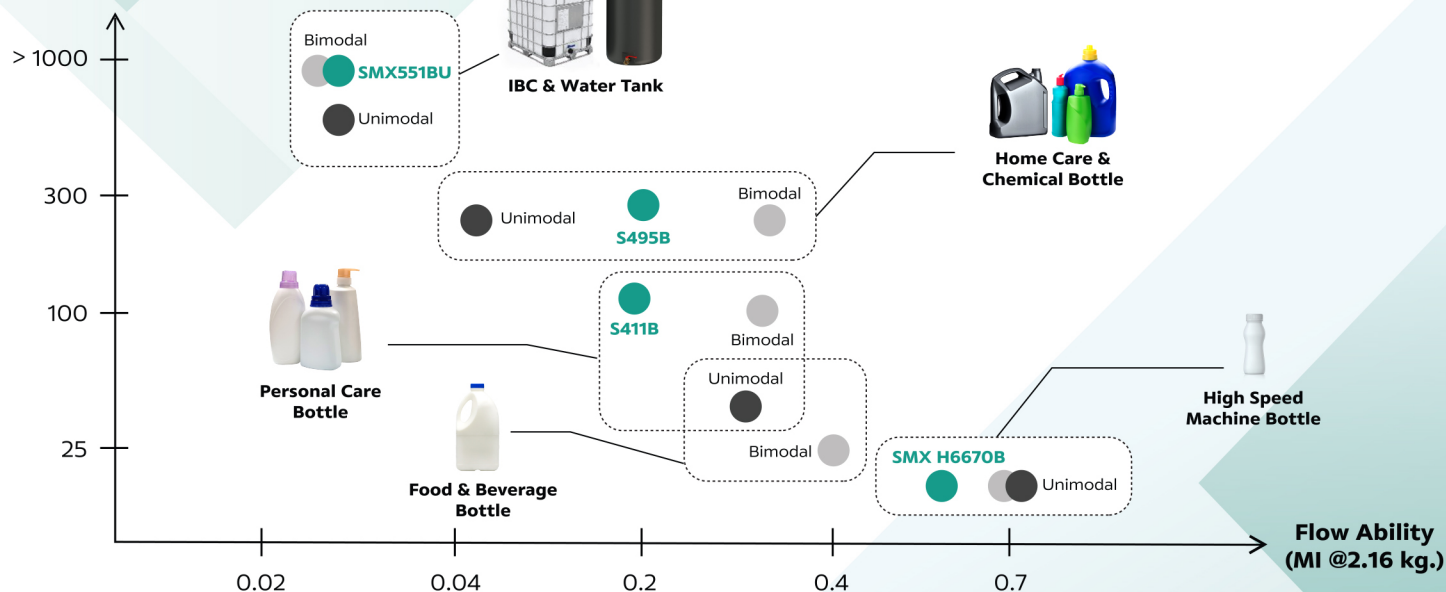
\*\* Green House Gas reduction calculation guideline by Thailand Green Gas Management Organization and based on 30% recycled content blend.

# HDPE by SMX™ Technology

## compared to unimodal and bimodal HDPE resins



Chemical Resistance  
(ESCR) - Hrs.



### SMX551BU: High Strength HDPE for IBC



Superior chemicals resistance with **65% higher ESCR\***



**6% weight reduction\***



**12% GHG Reduction\*\***

#### Recommended Applications

- Bulk Liquid Container (IBC)
- Hazardous chemical container
- Water tank up to 2,000 Liters

#### Product Characteristics

- High melt strength
- Excellent impact strength at low temperature
- Excellent combination of stiffness and impact strength
- Excellent chemical resistance
- Contained UV stabilizer

### S411B: HDPE for lightweight container



**8-20% lightweight\***



**6-13% Cost reduction\***



**5-12% GHG Reduction\*\***

#### Recommended Application

- Personal care bottle
- Cosmetic bottle
- Homecare bottle

#### Product Characteristics

- Excellent combination of stiffness and chemical resistance
- Easy processability
- Recyclability

### S495B: High Strength HDPE for Chemical container



**10-15% higher top load\*, thus less defect from production**



**Excellent chemical resistance**

#### Recommended Application

- Brake fluid bottle
- Chemical bottle
- Homecare bottle
- Lubricant bottle

#### Product Characteristics

- Excellent ESCR
- Excellent combination of stiffness and chemical resistance
- Good processability
- Recyclability

### H6670B: High productivity for high speed machine



**MI 0.7 High flow & productivity**



**5% Higher stiffness\***

#### Recommended Application

- Food & beverage bottle
- Bottle produced by high speed machine

#### Product Characteristics

- Excellent stiffness
- Good processability
- High productivity
- Odorless
- Recyclability

Remarks:

\*Compared to conventional grade

\*\*Green House Gas reduction calculation guideline by Thailand Green House Gas Management Organization

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