

**Indorama Eleme Petrochemicals Limited**

**TECHNICAL DATA SHEET**

**INDORAMA – LINEAR**

**NGL045RU**

**LINEAR LOW DENSITY PE GRADE FOR ROTO-MOULDING**

NGL045RU Medium Density Polyethylene Resin manufactured by IEPL using "SCLAIRTECH" solution polymerisation process of DU Pont, Canada (Now Nova Chemicals) designed for Rotational Moulding application. As a copolymer it combines good toughness, impact resistance and excellent environmental stress crack resistance due to UV Stabiliser & medium density of the resin and is therefore specially suitable for the producing chemical tanks, water storage tanks, milk cans and technical hollow articles.

**TYPICAL CHARACTERISTICS:**

PROPERTY	TEST METHOD	UNIT	TYPICAL VALUE
Melt Flow Index (190°C / 2.16 Kg )	ASTM D 1238	gm/10 min.	4.4
Density	ASTM D 792	gm/cm <sup>3</sup>	0.9325
Tensile Strength at Yield	ASTM D 638	Mpa	14
Elongation at Break	ASTM D 638	%	600
Flexural Yield Strength	ASTM D 790	Mpa	15
Flexural Modulus	ASTM D 790	Mpa	500
Izod Impact Test	ASTM D 256	J/m	150
Hardness	ASTM D 2240	Shore D	60
Vicat Softening Point	ASTM D 1525	°C	116

Above values are not to be construed as specifications.

PRODUCT BENEFITS	APPLICATIONS
<ul style="list-style-type: none"> <li>• Good processability</li> <li>• Very Good Resistance to Chemicals</li> <li>• Good impact strength</li> <li>• Very good ESCR</li> <li>• Good toughness</li> </ul>	<ul style="list-style-type: none"> <li>• Chemical tanks</li> <li>• Water storage tanks</li> <li>• Automotive components</li> <li>• Insulated crates</li> <li>• Pallets</li> </ul>

**PACKAGING:** NGL045RU is available in natural colour, pellets form in 25 Kg bags.

**FOOD CONTACT APPLICATIONS:** This grade meets with the requirements of FDA: CFR title 21, 177.1520 and EU regulation 10/2011 for food contact application when used unmodified and processed according to good manufacturing practices. Please contact us for details information and/or compliance certification documents.

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Our commitment to Quality, Health, Safety and Environment has been evident from the fact that IEPL is certified with all three ISO Standards ISO 9001, 14001 and OHSAS 18001.

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### SAFETY

The Material Safety Data Sheet (MSDS) contains information regarding health, safety and waste considerations for all IEPL Linear Low Density Polyethylene grades. We urge each customer or recipient of MSDS to study it carefully to become aware of and understand the hazards associated with the product. The customer should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire prevention, as necessary or appropriate to use and understand the data contained in the MSDS.

### STORAGE

The material is packed in 25 kg bags protecting it from contamination. Storage times of natural materials longer than 6 months may have a negative influence on the quality of the final product. It is generally recommended to convert all material latest within 6 months of production. The material is subjected to degradation by ultra-violet radiation or by high storage temperatures. Therefore the material must be protected from direct sunlight, temperatures above 40°C and high atmospheric humidity during storage. Further unfavorable storage conditions are large fluctuations in ambient temperature and high atmospheric humidity. These conditions may lead to moisture condensing inside the packaging. Under these circumstances, it is recommended to dry the material before use. After a storage period of more than 3 months drying of such material is recommended as standard practice.

### DISCLAIMER

The data, information and suggestions given herein are purely as a guide. IEPL undertakes no responsibility either for the results derived from their adoption or for possible positions in apparent contrast with existing patent rights. In view of the many factors that may affect processing and application, these data do not reveal the receiver of this information from the responsibility of carrying out their own tests and experiments; neither do they imply any legally binding assurance of certain properties or of suitability for a specific purpose of the products made with or on the basis of the information in this publication.

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