www.maskimi.com.my

Maskimi Polyol Sdn. Bhd.

Polyurethane System House

Maskimi Polyol Sdn. Bhd.

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– is engaged in the business of manufacturing and marketing Natural Oil Polyol, polyurethane systems including blended polyol and isocyanate, and providing technical assistant to satisfy its customers' needs.

Natural Solutions for a Natural World

Company Background

Established in 1997, Maskimi Polyol Sdn. Bhd. ("Maskimi"), a subsidiary of Bina Puri Holdings Berhad, is primarily engaged in the business of manufacturing and marketing Natural Oil Polyol ("NOP") and NOP based polyurethane (PU) systems.

The company plant with an investment of USD4 million is located in the capital of Malaysia and equipped with a capacity to produce 20 metric tonnes of NOP and 40 metric tonnes of blended polyol respectively per day.

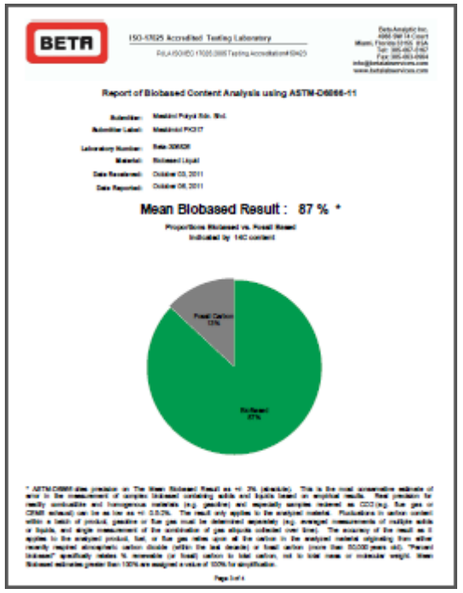
The Success of Maskimi Polyol

The company products have gained recognition and wide acceptance from all over the world. The success of the company stems from its ability to customize to exact end user specification, prompt technical support and assurance of continuous supply and delivery of exact end user requirements.

Maskimi has continuously satisfied and fulfilled the requirements of its customers with efficient quality control system which complies with an international quality assurance standard, ISO 9001:2008.

Technology

Maskimi's NOPs have Bio-based content up to 87 % as shown in the diagram. The manufacturing of NOP utilizes triglyceride based naturally occurring oil i.e. palm oil. The production of NOP and subsequently NOP based blended polyol are relatively simple, non-hazardous, and requires minimal energy. All these virtues have rendered the manufacturing process more environmentally friendly.


BETA

ISO-17025 Accredited Testing Laboratory

Report of Biobased Content Analysis using ASTM-D6866-11

Mean Biobased Result : 87 % *

Triglyceride | Reagents | NOP

Why Green?

- Minimize dependency on petrochemical sources as the price of fossil oil is fluctuating. Natural resources are renewable and promise a much larger market share in the foreseeable future.
- Increase interest of end-users in some markets that wish to produce products that are environmentally friendly.
- It is the inevitable future needs in the 21st century and new marketing trend for "eco-friendly products".

Introduction

Products

i. Base Polyols (Maskimiol Series)

Maskimi is a PU system house that provides full range of PU related products especially for rigid and flexible foam. These products are base and blended polyols, isocyanates, additives and cleaners.

Natural Oil Polyol – The products are categorized based on its hydroxyl value ranging from 28 – 330 mgKOH/gm. High hydroxyl value NOPs are utilized to develop rigid PUR systems to make foams of wide range of densities. Low hydroxyl value of NOPs are utilised to make semi rigid, flexible slab stock and flexible molded foam.

Polyether Polyol – Maskimi trades some world renown polyether polyols for rigid and flexible foam. Rigid foam polyols are synthesized from high functionalities initiator such as sucrose, sorbitol, glycerine and amine. Flexible foam polyols are typically made from high molecular weight triols for slab stock and molded foam.

Polymer Polyol – One of the most important components used for some heavy duty applications such as low density moulded automotive seating, high resilience foams, hot or cold mold foams, RIM and integral skin.

ii. Blended Polyols (Maskimifoam and Maskimiflex Series)

Rigid Blended Polyol – Maskimi rigid blended polyols show excellent insulating properties and can be used in wide range of applications such as construction, refrigeration, heat insulation, furniture parts, pre-insulated roofing and etc.

Maskimifoam 1

Fast curing closed cell spray foam system for the external insulation on a range of irregular surfaces.
Density : 30 – 45 kg/m^3
CS : 150 – 220 kPa

Maskimifoam 2

Fast curing closed cell high performance PUR foam system for the production of pre-insulated roofing and panels.
Density : 35 – 45 kg/m^3
CS : 130 – 200 kPa

Maskimifoam 5

Wood and plaster imitations, furniture parts and impact absorber. Water blown system is available with zero ODP.
Density : 100 – 500 kg/m^3
CS : 150 – 2000 kPa

Maskimifoam 7

It is suitable for the production of cold-room panel, freezer, ice box, pre-insulated pipe-in-pipe, partition wall and pour-in-situ application.
Density : 28 – 80 kg/m^3
CS :150 – 400 kPa

Maskimifoam 8

Fully and semi opened PUR foam system for the production of low cost pre-insulated roofing. Water blown system is available.
Density :18 – 30 kg/m^3
CS :100 – 200 kPa

Maskimifoam 9

Fine cell block foam. The foam is stable cell dimensional and easy to be cut into different shapes. PIR system also available.
Density : 30 – 55 kg/m^3
CS : 150 – 300 kPa

Flexible Blended Polyol – Tailor-made for the production of fast curing cold-molded high resiliency foam using modified polymeric MDI, which operates at a mold temperature of 30 to 60^{o}C. The polyols are designed to have better foam flowability and also suitable for both high and low pressure injection machine.

Product Series	FRD (kg/m^3)	Viscosity (mPa.S at 25^{o}C)	IFD (N at 65%)	Description
Maskimiflex 2				
	43 – 56	600 – 820	360 – 528	Designed for the production of high resiliency latex like mattress. Good foam flowability and exhibits a relatively even density distribution with a better skinned surface.
Maskimiflex 4				
	40 – 42	900 – 1100	230 – 238	Systems for the production of pillow and bolster. Good foam flowability and is suitable for most sizes of molding. Molding can be produced using high or low pressure dispensing equipment.
Maskimiflex 5				
	54 – 61	700 – 1600	697 – 820	Formulated for the production of seats and cushion for automotive, office, restaurant and etc. This system exhibits a relatively even density distribution with a better skinned surface. Water blown system is available with zero ODP.

iii. Isocyanate (Maskiminate Series)

Maskimi is the main distributor of well-known isocyanate from China which is also one of the biggest isocyanate manufacturers in the world. The full range of isocyanate is available in order to fulfill the different needs of customers. Maskimi also trades other major manufacturers' isocyanate.

Product series	Viscosity (mPa.S at 25^{o}C)	NCO% Wt	Description
Maskiminate 80	150 – 250	30.2 – 32.0	Common MDI. Widely used in the production of rigid insulation foams and polyisocyanurate. Good flowability.
Maskiminate 400	350 – 700	29.0 – 31.0	Can be used in the production of rigid PU foam with strong surface hardness. It is also used in isocyanurate foam.
Maskiminate 8002	120 – 160	26.3 – 27.3	Modified MDI, or modified polymeric-MDI. Can be used in the production of cold-cured high resilience foam and self-skinning foam.
Maskiminate 8019	100 – 140	26.0 – 27.0	Modified MDI. Can be used in the production of low density cold-cured high resilience foam in automotive, furniture and toy industries.

iv. Additives

Additives are needed to modify and control both the PU chemical reaction process and performance characteristics of the final product. It is a need for Maskimi does sell some major additives to customers especially for those who formulate their own system. These additives are surfactant, catalyst, flame retardant and blowing agent.

v. Others

Other chemicals like injection head cleanser or flusher, solvent to rinse PU, mold release agent as well as viscosity reducer.