#### ARKEMA COATING RESINS

# Product Application details

ENCOR® 4047 is a high solids acrylic based formulation which dries into a film showing pressure sensitive properties. This product is stabilised with APE-free surfactants and is free from solvents and plasticizers.

ENCOR® 4047 has been designed for the production of permanent PSA materials such as one and double side tapes for multiple applications (PU and PE foams, leather, fabrics,...)

### Performance Benefits

- High solids
- Coater ready. Suitable for knife and reverse roll coating systems
- Excellent adhesion and tack
- Good adhesion to Low Surface Energy substrates
- Good heat resistance
- Formaldehyde free\*

<sup>\*</sup> product formulated without formaldehyde or formaldehyde releasers. During normal conditions of use, this binder does not generate formaldehyde

|   | product formulated without formulaterly de of formulaterly de foliations. During formula conditions of disc, this brinder does not general | te formalderryde |
|---|--|------------------|
| Polymer<br>Type                             | Acrylic Copolymer fomulated with tackifying resins   |                  |
| Sales<br>Specifications                     | Solid Content at 105°C, % (ISO 3251)   | 61 - 63          |
|   | pH (ISO 976)   | 6,0 - 7,0        |
|   | Viscosity at 23°C, mPa.s (Brookfield RVT , 20rpm) (ISO 2555)   | 5000 - 6500      |
| Other<br>Characteristics <sup>1</sup>       | Stabilizing system   | А                |
|   | Tg (DSC), °C   | -30              |
|   | Density / Specific Gravity at 23°C, g/ml (ISO 2811)  | 1,02             |
|   | Average Particle size, nm (ISO 13321)  | 300              |
|   | Liquid Surface Tension (mN/m)  | 30               |
|   | 1 The data provided for these properties are typical values, intended only as guides, and should not be construed as sales specifications  |                  |
|   | 90° Peel after 24h on SS, N/25mm (FTM 2)   | 18 - 25          |
| Typical Adhesive<br>Properties <sup>1</sup> | Loop tack on SS, N (FTM 9)   | 20 - 25          |
|   | Shear adhesion from SS, h (FTM 8 / 1kg, 1in <sup>2</sup> )   | 15 - 35          |
|   | SAFT, °C (ASTM D-4498-95 / 1kg, 1 in <sup>2</sup> )  | 75 - 95          |
|   |  |                  |

Test settings: Backing: Corona treated PET 23 µm; Coating weight: 50g/m²; SS: Stainless Steel

## Formulation Guidelines

According to the involved coating system and the final application, addition of specific defoamers can be required. Compatibility and dosage have to be carefully checked in advance. In the case of poor wetting it is suggested to decrease the surface tension with the addition of suitable wetting agents such as dioctyl sulfosuccinates.



### Product Safety

Please refer to the corresponding Safety Data Sheet.

## Storage & Handling

ENCOR® 4047 should be stored indoors in the original, unopened and undamaged container, in a dry place at storage temperatures between 5°C and 30°C. Exposure to direct sunlight should be avoided.

The product is protected to prevent any microbial deterioration during normal conditions of storage but care should be taken to avoid accidental contamination during subsequent handling and processing.

In the above mentioned storage conditions the shelf life of the resin will be 6 months from the shipping date

The statements, technical information and recommendations contained herein are believed to be accurate as of the date hereof. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, Arkema expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information; NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED OR THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. The user should thoroughly test any application before commercialization. Nothing contained herein constitutes a license to practice under any patent and it should not be construed as an inducement to infringe any patent and the user is advised to take appropriate steps to be sure that any proposed use of the product will not result in patent infringement. See SDS for Health & Safety Considerations.

Arkema has implemented a Medical Policy regarding the use of Arkema products in medical devices applications that are in contact with the body or circulating bodily fluids (http://www.arkema.com/en/social-responsibility/responsibile-product-management/medical-device-policy/index.html) Arkema has designated medical grades to be used for such medical device applications. Products that have not been designated as medical grades are not authorized by Arkema for use in medical device applications that are in contact with the body or circulating bodily fluids. The addition, Arkema strictly prohibits the use of any Arkema products in medical device applications that are implanted in the body or in contact with bodily fluids or tissues for greater than 30 days. The Arkema trademarks and the Arkema name shall not be used in conjunction with customers' medical devices, including without limitation, permanent or temporary implantable devices, and customers shall not represent to anyone else, that Arkema allows, endorses or permits the use of Arkema products in such medical devices.

It is the sole responsibility for the manufacturer of the medical device to determine the suitability (including biocompatibility) of all raw materials, products and components, including any medical grade

It is the sole responsibility of the manufacturer of the medical device to determine the suitability (including biocompatibility) of all raw materials, products and components, including any medical grade Arkema products, in order to ensure that the final end-use product is safe for its end use; performs or functions as intended; and complies with all applicable legal and regulatory requirements (FDA or other national drug agencies). It is the sole responsibility of the manufacturer of the medical device to conduct all necessary tests and inspections and to evaluate the medical device under actual end-use requirements and to adequately advise and warn purchasers, users, and/or learned intermediaries (such as physicians) of pertinent risks and fulfill any postmarket surveillance obligations. Any decision regarding the appropriateness of a particular Arkema material in a particular medical device should be based on the judgment of the manufacturer, seller, the competent authority, and the treating physician.

#### **Arkema Coating Resins**

420, rue d'Estienne d'Orves 92705 Colombes Cedex - France arkema.com - arkemacoatingresins.com

