

HEALTH AND SAFETY STATEMENT

THIS DOCUMENT IS IMPORTANT – DO NOT HANDLE MATERIAL WITHOUT ENSURING THAT ALL RELEVANT PERSONNEL ARE AWARE OF CONTENTS

THAI ACRYLIC FIBRE

MATERIAL SAFETY DATA SHEET

‘BIRLACRIL’ BRAND ACRYLIC FIBRE

This document supersedes all previous documents issued by Thai Acrylic Fibre pertaining to Material Safety Data aspects of their staple, continuous tow and tops Thai Acrylic Fibre.

While Thai Acrylic Fibre endeavors to ensure that all statement, information and recommendations made relating to its products (whether in this data sheet or otherwise) are both correct and useful, they are based partly on data made available to them from other sources, and are not guaranteed by us to be accurate. Products are supplied subject to our conditions of sale. Thai Acrylic Fibre does not warrant that any products it supplies are fit for any particular purpose of an intended use by the customer and it is for the customer to satisfy itself that the products are so fit.

The information in this document does not affect obligations on manufacturer to comply with laws and regulation relating to Product Safety, Health & Safety at Work or environmental control or the requirements of fire authorities.

Birlacril

Acrylic Fibre_T100_ Material Safety Data Sheet, Issue 4, 07 March 2012

CONTENTS

TITLE PAGE AND DISCLAIMER

CONTENTS

INTRODUCTION

1. GENERAL INFORMATION

- Product
- Synonyms
- CAS Registry Number
- EINICS Registry Number
- Supplier
- Production Plant
- Further Information
- Labelling
- End-Uses

2. CHEMICAL AND PHYSICAL DATA

3. STORAGE AND HANDLING

- Storage
- Bale Stacking
- Bale Opening
- Processing Precautions
- Fibre Fly

4. WASTE DISPOSAL

5. TRANSPORT

6. HAZARD LABELLING

7. FIRE AND EXPLOSION

8. COMPLIANCE WITH INTERNATIONAL STANDARDS

Birlacril

Acrylic Fibre_T100_ Material Safety Data Sheet, Issue 4, 07 March 2012

INTRODUCTION

The material safety data contained in this document applies to Acrylic Fibre manufactured by Thai Acrylic Fibre and only applies to the product(s) named here in as supplied. It is not intended in any way to be exhaustive or as a substitute for the customer's own product testing, evaluation and safety procedures. As fibre characteristics can change significantly through various stages of processing, and also may constitute only a part of subsequent products, it is the responsibility of the downstream producer(s) to provide safety data for their products and to ensure that they are suitable for their intended end-use(s). Also, the information in this manual does not preclude the possibility of individual allergic response, which is unpredictable.

The information contained in this leaflet is in under continuous review, and liable to be modified from time to time.

Birlacril

Acrylic Fibre_T100_ Material Safety Data Sheet, Issue 4, 07 March 2012

1. GENERAL INFORMATION

PRODUCT

Thai Acrylic Fibre supplies product in ecru, filamentous solid in 'Staple Fibre', continuous filaments strand called 'Tow' and Stretch Breaker & Re-Breaker sliver 'TOP' with an odor typical of the finish (processing aid) applied.

SYNONYMS:

Acrylic Fibre

CAS REGISTRY NUMBER:

Acrylonitrile: 107-13-1

Vinyl Acetate: 108-05-4

EINICS REGISTRY NUMBER:

Acrylonitrile: - 203-466-5

Vinyl Acetate: 203-545-4

SUPPLIER:

Thai Acrylic Fibre Co. Ltd.
Thailand

Tel: (66-02) 22536745-54
Fax: (66-02) 22534679, 22536734

PRODUCTION PLANT:

Thai Acrylic Fibre
Thailand

Tel: (66-36) 251316-22, 240100
Fax: (66-36) 221854, 251325-6

FURTHER INFORMATION:

Contact Thai Acrylic Fibre, Thailand at the above address.

LABELLING:

Each bale or package carries a label with the product identification. If labels are missing or defaced please refer to Thai Acrylic Fibre before use.

END-USES

Birlacril

Acrylic Fibre_T100_ Material Safety Data Sheet, Issue 4, 07 March 2012

Customer must satisfy themselves, by consulting Thai Acrylic Fibre or in other ways, as to the suitability for any intended purpose. Second and substandard qualities of fibre must be used at the customers' own discretion and risk.

2. CHEMICAL AND PHYSICAL DATA

- 2.1 Name: Thai Acrylic Fibre
- 2.2 Chemical Type: Acrylonitrile, Vinyl acetate copolymer
- 2.3 Chemical Constituents: Polymer formed from:
- >85% Acrylonitrile
 - <15% other chemicals comprising of Vinyl Acetate
 - <0.002% residual solvent (sodium thiocyanate)
 - <1% Lubricant & Antistatic finish
 - Approximately 2% moisture content (conditioned)
 - <1% TiO₂ (delustred types only)
- 2.4 Appearance: Ecu
- 2.5 Odor: Typical of finish (processing aid) applied
- 2.6 Melting Point: Approximately 290° C (decompose)
- 2.7 Auto-ignition Temperature: Approximately 560° C
- 2.8 Specific Gravity: 1.17
- 2.9 Solubility in Water: Insoluble
- 2.10 Hydrophobic: Water content (condition) approximately 2%
- 2.11 Tenacity (cN/Tex): Dry: 20-40 (approx.) product dependent
- 2.12 Extension at Break (%): Dry: 25-50 (approx.) product dependent
- 2.13 Non Biodegradable
- 2.14 Finish Chemistry:

Lubricant & Antistatic Finish mixed together:

Birlacril

Acrylic Fibre_T100_ Material Safety Data Sheet, Issue 4, 07 March 2012

Blend of POE alkyl phosphate salt, Mineral oil, Anionic surfactant and PEG lauryl ester, PO/EO polymer, Oleyl-alcohol, Nonionic surfactant.

3. STORAGE AND HANDLING

3.1 STORAGE:

Store is under clean, dry, ambient conditions, avoiding frost and direct sunlight.

The storage area should be protected against fire in compliance with any relevant national or local fibre precaution regulations.

3.2 BALE STACKING:

3.2.1 Staple Fibre Bales

Bale weights are typically in the range of 316 kgs. Badly stacked bales can fall and cause serious injury. Maximum stacking heights are recommended up to 6 bales.

The following precautions are recommended:

- Floors should be firm and level
- Trucks used for handling bales should have driver overhead protection
- Pedestrians should keep clear during stacking and de-stacking
- Workers should not climb on stacks
- Un-authorized persons should keep clear of stacks
- Do not stack against walls
- Do stack in single rows
- Do not hoist or move by means of the bale wires or straps

3.2.2 Continuous Tow Bales

Bales are typically in the range 250~700 kgs. Maximum stacking heights are 6 bales (for 250 kgs. & 2 bales (for 600~700 kgs.)

3.2.3 Tops bales

Bales are typically in the range 220~280 kgs. Maximum stacking heights are 5 bales.

3.3 BALE OPENING

Bales (tow, staple and tops) must be opened with care as the wires are under tension and will spring open when cut.

Personnel opening bales should wear suitable protective clothing, including full face visors with chin guard, industrial gloves and safety footwear. All other personnel should stay clear

Birlacril

Acrylic Fibre_T100_ Material Safety Data Sheet, Issue 4, 07 March 2012

of the bale opening area. Bales should be opened using long handled wire cutters, minimum length of 270 mm.

3.4 PROCESSING PRECAUTIONS:

Processing involving the use of elevated temperatures should only be carried out in areas with adequate ventilation. Thai Acrylic Fibre may produce fumes under conditions of elevated temperature due to the presence of processing aids (finishes) and other residual chemicals.

3.5 FIBRE FLY:

In common with most textile material, Thai Acrylic Fibre will generate airborne fibres and dust (fly) when processed. With all processes regular cleaning is important in order to avoid accumulations of fly which create a fire hazard. In critical areas extraction systems should be fitted wherever practicable. Cleaning should be done with vacuum where possible. Thai Acrylic Fibre does not recommend the use of compressed air for cleaning.

Some are individuals, e.g. with asthma or bronchitis, are likely to be intolerant to high concentrations of fibre fly.

4. WASTE DISPOSAL:

Waste material should be disposed of in accordance with applicable governmental regulations for non-hazardous waste regulations. Birlacril fibre is a non biodegradable solid.

5. TRANSPORT:

Not classified as dangerous for conveyance under Carriage of Dangerous Goods by Road and Rail (Classification, Packing and labeling) Regulations 1994 or the internal agreement for carriage by sea (IMDG) or air (ICAO).

6. HAZARD LABELLING:

Not classified as dangerous for supply under The Chemicals (Hazard Information and Packing for Supply) Regulations 1994, or EC Dangerous Substances Directive 67/548/EEC or 93/21/EEC.

Toxicological Information: No data.

7. FIRE AND EXPLOSION

Birlacril

Acrylic Fibre_T100_ Material Safety Data Sheet, Issue 4, 07 March 2012

In common with many textile materials, Birlacril fibre will burn if brought into contact with flames or excessive heat and will give off smoke and fumes which are harmful and should not be inhaled.

Fire-fighters should wear self-contained breathing apparatus.

Small fires may be extinguished with water, foam, dry powder or CO₂. Large fires may be extinguished using water or foam.

Water should not be used if the fire source is electrical.

Care must be taken when using extinguishing media such as CO₂ or some smothering agents, which may spread loose fibre fires.

CO₂ or any other smothering agent may not conduct away heat contained in a mass of fibre or fibre bale which may consequently re-ignite if separate cooling steps are not taken.

8. COMPLAINTS WITH INTERNATIONAL STANDARDS

Oko-Tex Standard 100:

Thai Acrylic Fibre is certified under Oko-Tex Standard 100 (Class 1).