Piazza Boldrini, I 20097 San Donato Milanese (MI) - Italia Tel. centralino: +39 02520 I

www.polimerieuropa.com-info@polimerieuropa.com

Società per Azioni Sede Legale: San Donato Milanese (MI) - Piazza Boldrini, I - Italia Capitale Sociale € 1.553.400.000,00 i.v. Codice Fiscale e Registro Imprese di Milano 03823300821 Part. IVA IT 01768800748

Società soggetta all'attività di direzione e coordinamento dell'Eni S.p.A. Società con unico socio

R.E.A. Milano n. 1351279



S.D.S. N°: 7e

Issue Date:

(#) Revision: March 2008

June 1994

SAFETY DATA SHEET

1. IDENTIFICATION OF THE PREPARATION AND THE COMPANY / UNDERTAKING

1.1 Identification of the preparation.

Chemical name : Acrylonitrile Styrene Copolymer (SAN)

Designation or trade name : KOSTIL® B

1.2 Use of the preparation

Production of various plastic final applications.

1.3 Identification of the company / undertaking

Responsible for placing on the EU market:

POLIMERI EUROPA SpA

Piazza Boldrini,1 - 20097 S. Donato Milanese (MI), Italy telephone N°: +39 2 520 1

E-mail address of the competent person responsible for the SDS: SDS.PE@polimerieuropa.com

1.4 Emergency calls

Telephone N°: + 39 0376 305615

2. HAZARDS IDENTIFICATION

- Classification

This product is not classified as dangerous according to Directive 1999/45 and following amendments.

- Critical hazards to man:

The preparation is not hazardous in the form in which it is placed on the market and under the normal and recommended conditions of storage and use. The preparation is not dangerous according to the criteria set by the European Union. See also chapters 4 and 11.

- Critical hazards to the environment

The preparation is stable under normal conditions of storage and use. It is not hazardous to the environment in its normal state.

3. COMPOSITION / INFORMATION ON INGREDIENTS

The preparation is essentially made of:

STYRENE ACRYLONITRILE COPOLYMER (SAN)

CAS Name: Styrene Acrylonitrile Copolymer

CAS number: 9003-54-7

Decoding:

(#) = Information has been updated at the revision date

N.Av.= Not available (or: impossible)

N.Ap.= Not applicable



S.D.S. nº 7e - Kostil B

4. FIRST-AID MEASURES

- Symptoms, effects, indication for immediate action

Inhalation

Symptoms : (dust or gas/vapours released by heat) irritation of the

respiratory organs.

Expected delayed effects : N.Ap.

First aid actions : move the affected person away from the contaminated

area into fresh air; seek medical assistance.

Contact with skin

Symptoms : dust can irritate skin. No effect expected by contact with

the polymer at room temperature. Molten product

causes burns.

Expected delayed effects : N.Ap.

First aid actions : wash with plenty of water. In case of contact with melted

material, cool down with cold water and seek medical assistance. Do not remove the product that solidified on

skin. Treat as a burn.

Contact with eyes

Symptoms : (dust or gas/vapours released by heat) dust can redden

eyes.

Expected delayed effects : N.Ap.

First aid actions : wash with plenty of water. If irritation persists, seek

medical assistance.

Ingestion

Symptoms : abdominal pain.

Expected delayed effects : N.Ap.

First aid actions : no specific measure requested in case of ingestion. If

needed seek medical assistance.

- Specific and immediate treatment means to be available at the workplace: eye wash fountain.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media:

Water, water spray, foam, dry chemicals, carbon dioxide.

Cool down the containers using water spray.

- Extinguishing media which must not be used for safety reasons: N.Ap.

- Special exposure hazards arising from preparation itself, combustion products, resulting gases:

The preparation, when involved in a fire, burns with a sooty flame and release fumes made up of water, carbon dioxide, carbon monoxide (when starved of oxygen), nitrogen and nitrogen compounds (possible traces of HCN when starved of oxygen) and other combustion products. Overheating/pyrolysis evolves vapours made up of monomers, low molecular weight polymers and their oxidation products.



S.D.S. n°7e - Kostil B

- Special protective equipment for fire-fighters:

Wear suitable protective clothing (helmet, goggles, fire resistant gloves, boots) and protect respiratory organs (self contained breathing apparatus).

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions: Do not walk on granules to avoid slipping.
- Environmental precautions: Keep away from drains.
- **Methods for cleaning**: Collect mechanically. Reuse if possible or dispose of as required by national and local regulations (see section 13).

7. HANDLING AND STORAGE

7.1 - Handling

- Safety precautions

Recommended equipment and procedures:

In normal conditions masks with antidust filters should be available for use when requested.

7.2 - Storage

- Safety conditions

Avoid storage in the open under direct sunlight.

Keep away from sources of ignition, heat and sparks and from flammable products.

In storage and working areas avoid pellets spilling as a possible cause of slipping.

Take precautionary measures against static discharges; earth all storage silos.

Product should be stored in a safe manner, to avoid danger from unstable or damaged packaging units (octabins/bags/boxes on pallet). In particular, stacking of packaged units can be dangerous to warehouse personnel.

7.3 - Specific uses

Recommendations: N.Ap.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Exposure limit values

A) Occupational:

Threshold limit values ACGIH (Tab. 2006)*

	TWA (ppm; mg/m³)	STEL / C (ppm; mg/m³)
residual monomer:		
Styrene	20 ppm, A4	40 ppm, A4
Acrylonitrile	2 ppm, A3	
other substances:		
Particulate not otherwise	10 mg/m ³	
classified (inhalable)	3	
*Or atatutary limit values in the a	ountry concorned	

^{*}Or statutory limit values in the country concerned.

A4: Not Classifiable as a Human Carcinogen.

A3: Confirmed Animal Carcinogen with Unknown Relevance to Humans.

B) Medical:

- Recommended monitoring procedures: As required by the rules and regulations of each country.



S.D.S. n°7e - Kostil B

8.2 Exposure control

- Occupational exposure control:

Traces of monomers and other volatile substances may be given off during processing, particularly at unusually high processing temperatures.

Work rooms must be provided with adequate ventilation and exhaust equipment to collect dust and gas/vapours that may be evolved during the conversion.

- Equipment to provide adequate and personal protection:

Respiratory protection: Not necessary when no powders or vapours are present. Where present, use face mask with filter for organic vapours and/or dust.

Hand protection: chemical substance resistant gloves. Breakthrough time of the glove material: see producer's data.

Eye protection: not necessary when no powders or vapours are present. Where present, wear safety goggles.

Skin protection: standard work clothes.

- Specific hygiene measures: No smoking, eating or drinking in the workplace.

Wash hands thoroughly before eating, drinking or smoking.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance

physical state at 23 °C : solid (pellets 3mm diameter and length)
Colour : transparent bluish or according to request

- Odour : none

Density : 1070 kg/m3Bulk density : 660 kg/m3

- Softening temperature : 108 °C (Vicat ISO 306/A)

Autoflammability :> 450 °C
 Decomposition temperature :> 300 °C
 Solubility in water :insoluble

- Solubility with other solvents :soluble in chlorinated solvents, aromatic solvents, ketones

- Lower calorific value ca. 9,500 kcal/kg

10. STABILITY AND REACTIVITY

The preparation is stable and inert in the recommended storage and handling conditions (see sect. 7).

- Conditions/Materials to avoid:

Exposure to sunlight and/or heat. Accumulation of electrostatic charges. Oxidising substances.

- Hazardous decomposition products: (see sect. 5).

Comply with the advised processing temperatures to avoid the formation of noxious gas and vapours.

11. TOXICOLOGICAL INFORMATION

Specific information on the preparation is not available in the literature. Residual monomers are present in the product at trace levels, hindered in the polymer matrix and therefore not available in normal conditions.

- Dangerous effects from exposure to the preparation:

The possible dusts may cause irritation to the eyes and/or respiratory organs.

The polymer does not present any intrinsic health hazard when processed according to correct working procedures.



S.D.S. nº 7e - Kostil B

- Delayed and immediate effects from short and long term exposure:

Carcinogenicity, mutagenicity, reproductive toxicity: no evidence of these effects has been reported for the preparation.

12. ECOLOGICAL INFORMATION

- Ecotoxicity

The preparation is essentially a high molecular weight polymer, not regarded as ecotoxic.

- Mobility

Use according to good working practice, and avoid releasing the product into the environment.

- Persistence and degradability

The preparation is not a biodegradable polymer.

13. DISPOSAL CONSIDERATIONS

- **Description and handling of residues:** The same safety consideration apply to scraps/waste as apply to the preparation.

- Appropriate methods of disposal of preparation:

Residues should be disposed of as required by national and local regulations.

Incineration

Must be done under approved conditions, possibly with energy recovery and only at suitable facilities equipped with a scrubber for the treatment of fumes before their release into the atmosphere.

Recycling

After suitable treatment (cleaning, grinding, etc.), the preparation can be safely re-used, as is or mixed with fresh material, when this is compatible with the intended final application.

Landfilling

Should be avoided as far as possible. If unavoidable, use approved landfill sites.

- National and Community provisions relating to waste:

Directive 91/156/EEC of 18 March 1991; Directive 91/689/EEC of 12 December 1991; Directive 94/62/EEC of 20 December 1994.

14. TRANSPORT INFORMATION

The preparation is not classified as dangerous for transportation according to the following regulations: ADR/RID, IMO, IATA.

15. REGULATORY INFORMATION

- Information on classification and labelling:

The preparation is not dangerous according to the Directive 1999/45/EC. Label not required.

16. OTHER INFORMATION

This safety data sheet has been drawn up according to the requirements of Regulation 1907/2006/EC.

Data and information contained in this Safety Data Sheet are based on our available knowledge at the last revision date. No guarantee can be given as to the sufficiency of any safety measures contained in this Safety Data Sheet, nor can it be assumed that other or additional measures may not be required under particular or exceptional circumstances. The user must make sure of the fitness and completeness of the information, according to the specific use he wants to do.