

DATE REVISED : July 20, 2004

DATE PREPARED : Dec. 14, 1999

MATERIAL SAFETY DATA SHEET ( 1 / 3 )

SDS No. 408017

PRODUCT NAME: ELEPHANE R-970A

1 . CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ELEPHANE R-970A

MANUFACTURE'S NAME

Tomoegawa Paper Co., Ltd.

5-15, Kyobashi 1-chome, Chuo-ku, Tokyo 104-8335, Japan

Tel: +81-3-3272-4117

Fax: +81-3-3272-1866

2 . COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredients</u>	<u>CAS No.</u>	<u>Proportion (% by wt.)</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>Other Limits</u>
Polyimide	25038-81-7	> 43.0	N.E.	N.E.	None
Poly - ethylene - terephthalate	25038-59-9	< 38.0	N.E.	N.E.	None
NBR	9003-18-3	< 7.0	N.E.	N.E.	None
Bismaleimide	79922-55-7	< 6.0	N.E.	N.E.	None
Phenol resin	28453-20-5	< 6.0	N.E.	N.E.	None

3 . HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

Transparent brownish multi-layered films.

Can burn in a fire but not ordinarily an emergency problem.

Not a fire hazard in open areas.

Water fog, foam, CO<sub>2</sub>, and dry chemicals can be used on fires.

CRITICAL HAZARDS TO MAN AND ENVIRONMENT:

Not applicable.

4 . FIRST AID MEASURES

EYES: Even if there is no pain and vision is good, a physician should still examine the eyes since delayed damage may occur due to mechanical action.

SKIN: Flush with plenty of water. Use soap.

INGESTION: Not applicable.

INHALATION: Not applicable.

5 . FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Water fog, foam, dry chemical powder or carbon dioxide.

Toxic gases(carbon monoxide, nitrogen oxides, formaldehyde) will form upon combustion, and/or may be released during the assembly processes of this product.

FIRE-FIGHTING EQUIPMENT: Wear full bunker gear including a positive pressure self-contained breathing apparatus in case of burning in large quantities.

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6 . ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTION: No special measures required.

ENVIRONMENTAL PRECAUTIONS: No special measures required.

METHODS FOR CLEANING UP: No special measures required.

7 . HANDLING AND STORAGE

When prolonged or frequently repeated contact could occur, use impervious protective gloves, apron, boots and clothes.

Store in a cool, dry, well - ventilated location.

Avoid long storage periods since the product degrades with age.

8 . EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROL/VENTILATION

This product contains traces of such hazardous chemicals as Dimethyl acetamide, Formaldehyde, Phenol, Tetrahydrofuran and Toluene.

When processing at elevated temperature(above 200 ), these chemicals should be exhaled. Their OSHA PEL and ACGIH TLV are the following;

Chemicals	CAS No.	OSHA PEL	ACGIH TLV
Dimethyl acetamide	127-19-5	10ppm	10ppm
Formaldehyde	50-00-0	0.75ppm	0.3ppm
Phenol	108-95-2	5ppm	5ppm
Tetrahydrofuran	109-99-9	50ppm	200ppm
Toluene	108-88-3	200ppm	50ppm

Provide general and/or local exhaust ventilation to control atmospheric levels below the exposure guidelines.

PERSONAL PROTECTION EQUIPMENT:

RESPIRATORY PROTECTION: No precautions should be needed under normal use.

Use an appropriate respirator under atmospheric levels exceed PEL or TLV.

HAND PROTECTION: Impervious protective gloves recommended.

EYE PROTECTION: Goggles giving full protection recommended.

9 . PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Transparent brownish multi-layered films

ODOR: None

BOILING POINT: N.A.(not applicable)

VAP PRESS: N.A.

VAP DENSITY: N.A.

SOL IN WATER: Virtually insoluble

SP. GRAVITY: ca. 1.30 - 1.40

MELTING POINT: N.A.

pH: N.A.

% VOLATILE: N.A.

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1 0 . S T A B I L I T Y   A N D   R E A C T I V I T Y

STABILITY: This is a stable product.

INCOMPATIBILITY: (SPECIAL MATERIALS TO AVOID) None

HAZARDOUS DECOMPOSITION PRODUCTS: Toxic gases(carbon monoxide, nitrogen oxides, formaldehyde) will form upon combustion.

HAZARDOUS POLYMERIZATION: Will not occur.

1 1 . T O X I C O L O G I C A L   I N F O R M A T I O N

None

1 2 . E C O L O G I C A L   I N F O R M A T I O N

None

1 3 . D I S P O S A L   C O N S I D E R A T I O N S

WASTE DISPOSAL METHOD: Waste must be disposed of in accordance with country and local environmental control regulations.

1 4 . T R A N S P O R T   I N F O R M A T I O N

None

1 5 . R E G U L A T O R Y   I N F O R M A T I O N

Follow all regulations in your country.

1 6 . O T H E R   I N F O R M A T I O N

*The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. It dose not represent a guarantee for the properties of the product described in terms of the legal warranty.*

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