



L'ISOLANTE K-FLEX

SAFETY DATA SHEET in accordance with Directive 91/155/EEC

Date of
Issue:
26.03.'07

REV. NR.
0003

PAG. 1/6

1 Identification of the substance or preparation

1.1 IDENTIFICATION OF THE SUBSTANCE OR PREPARATION

Trade name **K-Flex ST (pipe, sheet self-adhesive sheet and systems)**
Use of the preparation **thermal insulating material**
Product number **isol0005**
Substance code **n.v.**

1.2 COMPANY/UNDERTAKING IDENTIFICATION

L'isolante K-Flex srl

Via Don Locatelli 35
20040 Roncello (MI) - Italy
Telephone: int +39 039 68241
Fax: int +39 039 6824560

1.3 EMERGENCY TELEPHONE NUMBER INT+39 - 039-68241

2. Composition/information on ingredients

This product is a foam (elastomeric).

2.1 SUBSTANCES PRESENTING A HEALTH / ENVIRONMENTAL HAZARD WITHIN THE MEANING OF DIRECTIVE 67/548/EEC

CAS number	EC number	Identification	m %	Symbols	R-phrases
n.ap.	n.ap.	n.ap.	n.ap.	n.ap.	n.ap.

See also section 15.

Full text of the R-phrases see point 16.2.

2.2 SUBSTANCES SUBJECT TO RECOGNISED EXPOSURE LIMIT VALUES PURSUANT TO COMMUNITY PROVISIONS BUT WHICH ARE NOT COVERED BY THE DIRECTIVE 67/548/EEC (SEE ALSO POINT 8.)

With regard to the physical condition of the product (foam, elastomeric) there is no relevance of ingredients having threshold limits of dust (aluminium hydroxide,PVC).

2.3 ADDITIONAL INFORMATION

It is a product in accordance with § 3 No. 5 Chemikaliengesetz (German legislation) and Annex VII to Directive 1999/45/EC.

3. Hazards identification

3.1 HAZARDS IDENTIFICATION

No special hazards have to be mentioned.

3.2 CRITICAL HAZARDS TO MAN

No special hazards have to be mentioned.

3.3 CRITICAL HAZARDS TO THE ENVIRONMENT

The product is water-insoluble.

4. First aid measures

4.1 GENERAL INFORMATION None.

4.2 AFTER INHALATION n.ap.

4.3 AFTER CONTACT WITH SKIN

No special measures necessary if used correctly.

4.4 AFTER CONTACT WITH EYES

No special measures necessary if used correctly.

4.5 AFTER INGESTION n.ap.

4.6 HINTS FOR THE PHYSICIAN

Symptoms n.av.

Hazards n.av.

Treatment n.av.

5. Fire-fighting measures



L'ISOLANTE K-FLEX

SAFETY DATA SHEET in accordance with Directive 91/155/EEC

Date of
Issue:
26.03.'07

REV. NR.
0003

PAG. 2/6

- 5.1** SUITABLE EXTINGUISHING MEDIA
The product has flame-retardant effects.
Co-ordinate fire-fighting measures to the fire surroundings.
- 5.2** EXTINGUISHING MEDIA WHICH MUST NOT BE USED FOR SAFETY REASONS
The product has flame-retardant effects.
Co-ordinate fire-fighting measures to the fire surroundings.
- 5.3** SPECIAL EXPOSURE HAZARDS ARISING FROM THE SUBSTANCE OR PREPARATION ITSELF, COMBUSTION PRODUCTS, RESULTING GASES
In the event of fire the following can be released:
carbon monoxide, carbon dioxide, hydrogen chloride, traces of hydrogen bromide, sulphur dioxide and hydrogen cyanide.
- 5.3** SPECIAL PROTECTIVE EQUIPEMENT FOR FIREFIGHTERS
Use breathing apparatus.
- 5.4** FURTHER INFORMATION
Do not inhale explosion and combustion gases.

6. Accidental release measures

- 6.1** PERSONAL PRECAUTIONS
(see also point 8., Personal protective equipment)
No special measures necessary.
- 6.2** ENVIRONMENTAL PRECAUTIONS
(see also point 13., Disposal considerations)
No special measures necessary.
- 6.3** METHODS FOR CLEANING UP / TAKING UP
Pick up mechanically and dispose of waste material.
- 6.4** ADDITIONAL INFORMATION None.

7. Handling and storage (National measures see points 15. and 16.)

- 7.1** HANDLING
Advice on safe handling
No special measures necessary if used correctly.
Advice on protection against fire and explosion n.ap.
Additional advice on system design
No additional advice.
- 7.2** STORAGE
Requirements for storage rooms and vessels
Keep container dry in a well-ventilated place.
Advice on storage compatibility
Keep away from strong acids and oxidising agents.
Further information on storage conditions None.
Storage class (for Germany only)
LGK 13 (noncombustible solid) according to VCI-Lagerklassenkonzept.
- 7.3** SPECIFIC USE (S)
Insulation of tubes, insulation of tanks (industrial works), air-conditionings, heatings and sanitations.

8. Exposure controls / personal protection

8.1 EXPOSURE LIMIT VALUES (FOR GERMANY ONLY)

CAS number	identification	threshold limits	remarks
n.ap.	n.ap.	n.ap.	n.ap.

Remark: With regard to the physical condition of the product (foam, elastomeric) there is no relevance of ingredients having threshold limits of dust (aluminium hydroxide).



L'ISOLANTE K-FLEX

SAFETY DATA SHEET in accordance with Directive 91/155/EEC

Date of
Issue:
26.03.'07

REV. NR.
0003

PAG. 3/6

8.2 EXPOSURE CONTROLS (OCCUPATIONAL EXPOSURE CONTROLS / ENVIRONMENTAL EXPOSURE CONTROLS)

See section 7.

Personal protective equipment

Respiratory protection: n.ap.

Hand protection: n.ap.

Eye protection: n.ap.

Body protection: n.ap.

General protective measures and hygiene measures:

Wash hands before breaks and after work.

9. Physical and chemical properties

9.1 GENERAL INFORMATION

Physical state: solid (foam, tubes/hoses and plates) *Colour:* black *Odour:* neutral

9.2 IMPORTANT HEALTH, SAFETY AND ENVIRONMENTAL INFORMATION

pH (as supplied): n.ap.v of an aqueous solution: 7,0 (aqueous extraction)

Boiling point / boiling range (°C): n.ap.

Melting point / melting range (°C): n.ap.

Thermal decomposition (°C): > 400

Flash point (°C), c.c.: n.ap.

Flammability (solid, gas): n.ap.

Autoflammability: n.ap.

Ignition temperature (°C): n.ap.

Oxidising properties: n.ap.

Explosive properties: n.ap.

Lower explosion limit: n.ap. Upper explosion limit: n.ap.

Vapour pressure: n.ap.

Density / Bulk density: 40 - 90 kg/m³

Solubility in water: insoluble

Soluble in: n.ap.

Partition coefficient n-octanol/water: n.ap.

Viscosity: n.ap.

Solvent content: n.ap.

9.3 OTHER INFORMATION: None.

10. Stability and reactivity

10.1 CONDITIONS TO AVOID / MATERIALS TO AVOID

Materials to avoid: strong mineral acids (nitric acid, hydrochloric acid, sulfuric acid, hydrofluoric acid), bromine, chlorine, hydrogen peroxide, aniline, benzene, chloroform, Freon 11, fuel FAM, carbon tetrachloride, trichloroethylene and xylene.

In accordance with test results the product will be moderately to intensively attacked by these materials.

10.2 HAZARDOUS DECOMPOSITION PRODUCTS

In the event of fire: carbon monoxide, carbon dioxide, hydrogen chloride, traces of hydrogen bromide, sulphur dioxide and hydrogen cyanide.

Under certain conditions of combustion traces of other toxic substances cannot be excluded.

10.3 ADDITIONAL INFORMATION: None.

11. Toxicological information

11.1 TOXICOLOGICAL EXAMINATION

Acute oral toxicity / acute dermal toxicity / acute inhalation toxicity

LD50 rat, oral (mg/kg) n.av.

LD50 rat, dermal (mg/kg) n.av.



L'ISOLANTE K-FLEX

SAFETY DATA SHEET in accordance with Directive 91/155/EEC

Date of
Issue:
26.03.'07

REV. NR.
0003

PAG. 4/6

LC50 rat, inhalation	(mg/l/4h)	n.av.
<i>Irritant effect</i>		
Irritant effect on skin		n.av.
Irritant effect on eyes		n.av.
Sensitisation		n.av.
<i>Subacute toxicity / Sub-chronic toxicity</i>		
<i>Chronic toxicity</i>		n.av.
<i>Mutagenicity / Teratogenicity / Carcinogenicity</i>		n.ap.
<i>Further information</i>		None.
11.2 EXPERIENCES MADE IN PRACTICE		None.
11.3 GENERAL REMARKS		None.

12. Ecological information

12.1 ECOTOXICITY

Aquatic toxicity

LC50 (fish) n.av.

EC50 (daphnia) n.av.

IC50 (algae) n.av.

Behaviour in sewage works: The product has to be removed mechanically (trash rack).

12.2 MOBILITY

The product has not been tested.

12.3 DATA ON ELIMINATION (PERSISTENCE AND DEGRADABILITY)

The product has not been tested. The product is water-insoluble.

12.4 BIOACCUMULATIVE POTENTIAL

The product has not been tested.

12.5 OTHER ADVERSE EFFECTS

Ozone depletion potential n.av.

Photochemical ozone creation potential n.av.

AOX-hint Not to apply.

12.6 FURTHER INFORMATION

Chemical oxygen demand (COD) n.av.

Biochemical oxygen demand (BOD5) n.av.

The product is water-insoluble.

Contains according to the formulation following heavy metals and compounds of the Directives 76/464/EEC and 80/68/EEC:

List I: organic phosphorous compounds, organic halogen compounds

13. Disposal considerations

13.1 PRODUCT / UNUSED PRODUCT	Waste disposal corresponding to European Waste Catalogue. Wastes must be classified with respect to their origin and depending on specific processing steps. The waste codes mentioned as follows are only constituted as our recommendations. Referring to the particular case they should be completed or revised.
Waste type	Construction and demolition wastes
Waste notation	Insulation materials and asbestos-containing construction materials
EC waste code	17 06 04 insulation materials other than those mentioned in 17 06 01 and 17 06 03
Disposal operations	D 10 Incineration on land
Recovery operations	R 3 Recycling/reclamation of organic substances which are not used as solvents
	R 5 Recycling/reclamation of other inorganic materials
13.2 CONTAMINATED PACKAGING	



L'ISOLANTE K-FLEX

SAFETY DATA SHEET in accordance with Directive 91/155/EEC

Date of
Issue:
26.03.'07

REV. NR.
0003

PAG. 5/6

Recommendation Contaminated packaging should be emptied as far as possible
and after appropriate cleansing may be taken for reuse.
Recommended cleansing agent Remove residues mechanically.t

14. Transport information

14.1 LAND TRANSPORT ADR / RID / GGVSE

UN-No.: Name of the good:
Class: Classification code:
Packing group: Danger labels:
Remark: No dangerous good in accordance with the regulations.

14.2 MARINE TRANSPORT IMDG-CODE

UN-No.: Proper Shipping Name:
Class: Subsidiary Risk:
Packing group: EmS:
Remark: No dangerous good in accordance with the regulations.

14.3 AIR TRANSPORT IATA-DGR

UN/ID-No.: Proper Shipping Name:
Class: Subsidiary Risk:
Hazard Labels: Packing group:
Remark: No dangerous good in accordance with the regulations.

15. Regulatory information

15.1 LABELLING IN ACCORDANCE WITH DIRECTIVE EC

Symbol(s) of danger: n.ap.
Indication(s) of danger: n.ap.
Hazardous component(s) to be indicated on label: n.ap.
R-phrases: n.ap.
S-phrases: n.ap.
Special labelling for certain preparations: n.ap.

15.2 NATIONAL MEASURES (FOR GERMANY ONLY)

Restriction of occupation: n.ap.
Major-accident Regulation: n.ap.
Regulation on clean air (TA Luft): n.ap.
Fire and explosion hazards: n.ap.

Water hazard class: not hazardous to water in accordance with VwVwS
The Federal State Enactment for Facilities to Handle
Water Endangering Substances (German VAWS–
Anlagen-Verordnung) has to be observed

16. Other information

16.1 KEEPING (RESTRICTIONS) n.ap.
Distribution for industry consumer and trade companies

16.2 FULL TEXT OF THE R-PHRASES Not to apply.

16.3 TECHNICAL CONTACT POINT
L'Isolante K-Flex srl - Roncello (MI) - Italy
Telephone: +39 039 68241
Telefax: +39 039 6824560

16.4 THIS INFORMATION IS BASED ON OUR PRESENT STATE OF KNOWLEDGE.
IT SHOULD NOT THEREFORE BE CONSTRUED AS GUARANTEEING SPECIFIC PROPERTIES OF THE PRODUCTS AS
DESCRIBED OR THEIR SUITABILITY FOR A PARTICULAR APPLICATION.



L'ISOLANTE K-FLEX

SAFETY DATA SHEET
in accordance with Directive 91/155/EEC

Date of
Issue:
26.03.'07

REV. NR.
0003

PAG. 6/6

L'ISOLANTE K-FLEX

Via Don Locatelli, 35 - 20040 Roncello (MI) - Italy

Tel. +39 039 68241 Fax. +39 039 6824560

e-mail international@isolante.com / italysales@isolante.com

www.kflex.com