



L'ISOLANTE K-FLEX

K-FLEX COLOR PAINT

Revision nr.3
Dated 20/6/2014
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EN

Safety data sheet

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Code: **43194935**
Product name: **K-Flex Color Paint grey**

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use: **Painting product**

1.3. Details of the supplier of the safety data sheet

Name: **L'Isolante K-Flex Srl**
Full address: **Via Leonardo da Vinci, 36**
District and Country: **20877 RONCELLO (MB) Italia**

Tel. **+39 039 6824.1**
Fax **+39 039 6824350**

e-mail address of the competent person responsible for the Safety Data Sheet: **Kflex-Reach@isolante.com**

1.4. Emergency telephone number

For urgent inquiries refer to: **Centro Antiveleni Ospedale di Niguarda - Milano - Tel. +39 02 66101029**

SECTION 2. Hazards identification.

2.1. Classification of the substance or mixture.

The product is not classified as hazardous pursuant to the provisions set forth in Directives 67/548/EEC and 1999/45/EC (and subsequent amendments and supplements). However, since the product contains hazardous substances in concentrations such as to be declared in section no. 3, it requires a safety data sheet with appropriate information, compliant to EC Regulation 1907/2006 and subsequent amendments.

2.2. Label elements.

Hazard labelling pursuant to Directives 67/548/EEC and 1999/45/EC and subsequent amendments and supplements.

Warning symbols: None.

Hazard sentences (R): None.

S 3/7 KEEP CONTAINER TIGHTLY CLOSED IN A COOL PLACE.
S24/25 AVOID CONTACT WITH SKIN AND EYES.
S29 DO NOT EMPTY INTO DRAINS.
S43 IN CASE OF FIRE, USE CO₂, FOAM, CHEMICAL POWDER FOR FLAMMABLE LIQUIDS. WATER MAY PROVE NOT TO BE EFFICACIOUS TO EXTINGUISH THE FIRE.

Contains: **HYDROXYPHENYL-BENZOTRIAZOLE DERIVATES**
May produce an allergic reaction.

Safety data sheet available for professional users on request.

2.3. Other hazards.

Information not available.

**SECTION 3. Composition/information on ingredients.****3.1. Substances.**

Information not relevant.

3.2. Mixtures.**Contains:**

Identification.	Conc. %.	Classification 67/548/EEC.	Classification 1272/2008 (CLP).
2-(2-BUTOXYETHOXY)ETHANOL			
CAS. 112-34-5	4 - 5	Xi R36	Eye Irrit. 2 H319
EC. 203-961-6			
INDEX. 603-096-00-8			
Reg. no. 01-2119475104-44			
AMMONIA			
CAS. 1336-21-6	2 - 3	C R34, N R50, Note B	Skin Corr. 1B H314, STOT SE 3 H335, Aquatic Acute 1 H400 M=1, Note B
EC. 215-647-6			
INDEX. 007-001-01-2			
Reg. no. 01-2119488876-14			
DIPROPYLENE GLYCOL MONOMETHYL ETHER			
CAS. 34590-94-8	0,6 - 0,7		
EC. 252-104-2			
INDEX. 603-050-00-7			
Reg. no. 01-2119450011-60			
ETHANEDIOL			
CAS. 107-21-1	0,1 - 0,2	Xn R22	Acute Tox. 4 H302
EC. 203-473-3			
INDEX. 603-027-00-1			
Reg. no. 01-2119456816-28			
2-BUTOXYETHANOL			
CAS. 111-76-2	0 - 0,1	Xn R20/21/22, Xi R36/38	Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315
EC. 203-905-0			
INDEX. 603-014-00-0			
Reg. no. 01-2119475108-36			
1-METHOXY-2-PROPANOL			
CAS. 107-98-2	0 - 0,05	R10, R67	Flam. Liq. 3 H226, STOT SE 3 H336
EC. 203-539-1			
INDEX. 603-064-00-3			
Reg. no. 01-2119457435-35			

Note: Upper limit is not included into the range.

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F), N = Dangerous for the Environment(N)

SECTION 4. First aid measures.**4.1. Description of first aid measures.**

EYES: Remove contact lenses, if present Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

4.2. Most important symptoms and effects, both acute and delayed.

For symptoms and effects caused by the contained substances, see chap. 11.

4.3. Indication of any immediate medical attention and special treatment needed.

Information not available.



SECTION 5. Firefighting measures.

5.1. Extinguishing media.

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

5.3. Advice for firefighters.

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures.

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions.

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up.

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10.

Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections.

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage.

7.1. Precautions for safe handling.

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

7.2. Conditions for safe storage, including any incompatibilities.

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s).

Information not available.

**SECTION 8. Exposure controls/personal protection.****8.1. Control parameters.**

Regulatory References:

United Kingdom

EH40/2005 Workplace exposure limits. Containing the list of workplace exposure limits for use with the Control of Substances Hazardous to Health Regulations (as amended).

Éire

Code of Practice Chemical Agent Regulations 2011.

OEL EU

Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.

TLV-ACGIH

ACGIH 2012

2-(2-BUTOXYETHOXY)ETHANOL**Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
OEL	EU	67,5	10	101,2	15

AMMONIA**Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
TLV-ACGIH		17	25	24	35

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

SECTION 9. Physical and chemical properties.**9.1. Information on basic physical and chemical properties.**

Appearance	liquid
Colour	grey
Odour	characteristic
Odour threshold.	Not available.
pH.	Not available.
Melting point / freezing point.	Not available.
Initial boiling point.	Not available.
Boiling range.	Not available.
Flash point.	> 60 °C.

**SECTION 9. Physical and chemical properties. ... / >>**

Evaporation Rate	Not available.
Flammability of solids and gases	Not available.
Lower inflammability limit.	Not available.
Upper inflammability limit.	Not available.
Lower explosive limit.	Not available.
Upper explosive limit.	Not available.
Vapour pressure.	Not available.
Vapour density	Not available.
Relative density.	1,154 Kg/l
Solubility	miscible
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature.	Not available.
Decomposition temperature.	Not available.
Viscosity	Not applicable.
Explosive properties	Not available.
Oxidising properties	Not available.

9.2. Other information.

Solid content.	43,43 %		
VOC (Directive 1999/13/EC) :	5,06 %	- 58,39	g/litre.
VOC (volatile carbon) :	5,06 %	- 58,39	g/litre.

SECTION 10. Stability and reactivity.**10.1. Reactivity.**

There are no particular risks of reaction with other substances in normal conditions of use.

AMMONIA: corrodes aluminium, iron, zinc, copper and their alloys.

10.2. Chemical stability.

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions.

No hazardous reactions are foreseeable in normal conditions of use and storage.

AMMONIA: risk of explosion on contact with strong acids and iodine. Can react dangerously with strong bases .

2-(2-BUTOXYETHOXY)ETHANOL: can react with oxidising agents. It forms peroxides with atmospheric oxygen. When it reacts with aluminium it can generate hydrogen. May form explosive mixtures with air.

10.4. Conditions to avoid.

None in particular. However the usual precautions used for chemical products should be respected.

2-(2-BUTOXYETHOXY)ETHANOL: avoid contact with the air.

10.5. Incompatible materials.

AMMONIA: silver, lead, zinc and their salts; hydrochloric acid, nitric acid, oleum, halogens, acrolein, nitromethane and acrylic acid.

2-(2-BUTOXYETHOXY)ETHANOL: oxidising substances, strong acids and alkaline metals.

10.6. Hazardous decomposition products.

AMMONIA: nitric oxides.

2-(2-BUTOXYETHOXY)ETHANOL: hydrogen.

SECTION 11. Toxicological information.

According to currently available data, this product has not yet produced health damages. Anyway, it must be handled carefully according to good industrial practices. This product may have slight health effects on sensitive people, by inhalation and/or cutaneous absorption and/or contact with eyes and/or ingestion.

11.1. Information on toxicological effects.

2-(2-BUTOXYETHOXY)ETHANOL: can be absorbed by inhalation, ingestion and skin contact; it is irritant to the skin and especially to the eyes; spleen damage may occur. Inhalation is unlikely to occur at room temperature due to the low vapour tension of the substance.

AMMONIA
LD50 (Oral). 350 mg/kg Rat

**SECTION 11. Toxicological information.** ... / >>

2-(2-BUTOXYETHOXY)ETHANOL	
LD50 (Oral).	3384 mg/kg Rat
LD50 (Dermal).	2700 mg/kg Rabbit
2-BUTOXYETHANOL	
LD50 (Oral).	615 mg/kg Rat
LD50 (Dermal).	405 mg/kg Rabbit
LC50 (Inhalation).	2,2 mg/l/4h Rat
ETHANEDIOL	
LD50 (Oral).	> 2000 mg/kg Rat
LD50 (Dermal).	9530 mg/kg Rabbit
1-METHOXY-2-PROPANOL	
LD50 (Oral).	5300 mg/kg Rat
LD50 (Dermal).	13000 mg/kg Rabbit
LC50 (Inhalation).	54,6 mg/l/4h Rat

SECTION 12. Ecological information.

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation.

12.1. Toxicity.

AMMONIA	
LC50 - for Fish.	47 mg/l/96h Channa punctata
EC50 - for Crustacea.	20 mg/l/48h Daphnia magna
2-(2-BUTOXYETHOXY)ETHANOL	
LC50 - for Fish.	1300 mg/l/96h
EC50 - for Crustacea.	100 mg/l/48h Daphnia magna
2-BUTOXYETHANOL	
LC50 - for Fish.	1490 mg/l/96h Lepomis macrochirus
EC50 - for Crustacea.	1001 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants.	1840 mg/l/72h
1-METHOXY-2-PROPANOL	
LC50 - for Fish.	20,8 g/l Pimephales promelas
EC50 - for Crustacea.	23300 mg/l/48h Daphnia magna

12.2. Persistence and degradability.

Information not available.

12.3. Bioaccumulative potential.

Information not available.

12.4. Mobility in soil.

Information not available.

12.5. Results of PBT and vPvB assessment.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects.

Information not available.

**SECTION 16. Other information. ... / >>**

STOT SE 3	Specific target organ toxicity - single exposure, category 3
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

R10	FLAMMABLE.
R20/21/22	HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
R22	HARMFUL IF SWALLOWED.
R34	CAUSES BURNS.
R36	IRRITATING TO EYES.
R36/38	IRRITATING TO EYES AND SKIN.
R50	VERY TOXIC TO AQUATIC ORGANISMS.
R67	VAPOURS MAY CAUSE DROWSINESS AND DIZZINESS.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation.

GENERAL BIBLIOGRAPHY

1. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
4. Regulation (EC) 1272/2008 (CLP) of the European Parliament
5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EC) 453/2010 of the European Parliament
7. Regulation (EC) 286/2011 (II Atp. CLP) of the European Parliament
8. Regulation (EC) 618/2012 (III Atp. CLP) of the European Parliament
9. The Merck Index. - 10th Edition



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SECTION 16. Other information. ... / >>

10. Handling Chemical Safety
11. Niosh - Registry of Toxic Effects of Chemical Substances
12. INRS - Fiche Toxicologique (toxicological sheet)
13. Patty - Industrial Hygiene and Toxicology
14. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
15. ECHA website

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Changes to previous review:

The following sections were modified:

02.