

## KMK 1601 VETRORESINA PUTTY



### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

**1.1 Product identifier:** KMK 1601 VETRORESINA PUTTY

**Other means of identification:**

**UFI:** 72Y4-TPHY-3003-MHPS

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

Relevant uses (Professional users): Filler for repairing surfaces

Relevant uses (Industrial user): Filler for repairing surfaces

Uses advised against: All uses not specified in this section or in section 7.3

**1.3 Details of the supplier of the safety data sheet:**

Kimakem srl

Via Don G. Fortuna 82

36050 Monteviale - Vicenza - Italia

Phone: +39 0444 1220020

info@kimakem.com

<https://www.kmk-refinish.com>

**1.4 Emergency telephone number:** +39 0444 1220020 (Monday to Friday 8:30 -17:30 GMT +1:00)

### SECTION 2: HAZARDS IDENTIFICATION \*\*

**2.1 Classification of the substance or mixture:**

**CLP Regulation (EC) No 1272/2008:**

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Eye Irrit. 2: Eye irritation, Category 2, H319

Flam. Liq. 3: Flammable liquids, Category 3, H226

Repr. 2: Reproductive toxicity, Category 2, H361d

Skin Irrit. 2: Skin irritation, Category 2, H315

Skin Sens. 1A: Sensitisation, skin, Category 1A, H317

STOT RE 1: Specific target organ toxicity — Repeated exposure, Hazard Category 1 (Inhalation), H372

**2.2 Label elements:**

**CLP Regulation (EC) No 1272/2008:**

Danger



**Hazard statements:**

H226 - Flammable liquid and vapour.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H361d - Suspected of damaging the unborn child.

H372 - Causes damage to organs through prolonged or repeated exposure (Inhalation). Organs affected: Ear.

**Precautionary statements:**

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280: Wear protective gloves/face protection/protective clothing/respiratory protection/protective footwear.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313: IF exposed or concerned: Get medical advice/attention.

P370+P378: In case of fire: Use Foam extinguisher (AB), Dry Chemical Powder (ABC) Fire Extinguisher, Carbon dioxide extinguisher (BC) to extinguish.

P501: Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively.

**Supplementary information:**

Contains 2,2'-(m-tolylimino)diethanol.

**Substances that contribute to the classification**

\*\* Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

## KMK 1601 VETRORESINA PUTTY



### SECTION 2: HAZARDS IDENTIFICATION \*\* (continued)

styrene; maleic anhydride

**UFI:** 72Y4-TPHY-3003-MHPS

#### 2.3 Other hazards:

Product does not meet PBT/vPvB criteria

Endocrine-disrupting properties: The product does not meet the criteria.

\*\* Changes with regards to the previous version

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS \*\*

#### 3.1 Substance:

Not relevant

#### 3.2 Mixture:

**Chemical description:** Mixture composed of additives, aggregates, pigments and resins in solvents

#### Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 100-42-5 EC: 202-851-5 Index: 601-026-00-0 REACH: 01-2119457861-32-XXXX	<b>styrene<sup>(1)</sup></b> Regulation 1272/2008	Acute Tox. 4: H332; Aquatic Chronic 3: H412; Asp. Tox. 1: H304; Eye Irrit. 2: H319; Flam. Liq. 3: H226; Repr. 2: H361d; Skin Irrit. 2: H315; STOT RE 1: H372; STOT SE 3: H335 - Danger	Self-classified  <b>10 - &lt;25 %</b>
CAS: 91-99-6 EC: 202-114-8 Index: Not relevant REACH: 01-2120791683-42-XXXX	<b>2,2'-(m-tolylimino)diethanol<sup>(1)</sup></b> Regulation 1272/2008	Acute Tox. 4: H302; Eye Dam. 1: H318; Skin Irrit. 2: H315; Skin Sens. 1B: H317; STOT RE 2: H373 - Danger	Self-classified  <b>0,1 - &lt;0,3 %</b>
CAS: 7664-38-2 EC: 231-633-2 Index: 015-011-00-6 REACH: 01-2119485924-24-XXXX	<b>Phosphoric acid<sup>(2)</sup></b> Regulation 1272/2008	Acute Tox. 4: H302; Eye Dam. 1: H318; Met. Corr. 1: H290; Skin Corr. 1B: H314 - Danger	Self-classified  <b>0,01 - &lt;0,1 %</b>
CAS: 108-31-6 EC: 203-571-6 Index: 607-096-00-9 REACH: 01-2119472428-31-XXXX	<b>maleic anhydride<sup>(1)</sup></b> Regulation 1272/2008	Acute Tox. 4: H302; Eye Dam. 1: H318; Resp. Sens. 1: H334; Skin Corr. 1B: H314; Skin Sens. 1A: H317; STOT RE 1: H372; EUH071 - Danger	ATP ATP13  <b>0,01 - &lt;0,1 %</b>
CAS: 141-78-6 EC: 205-500-4 Index: 607-022-00-5 REACH: 01-2119475103-46-XXXX	<b>Ethyl acetate<sup>(2)</sup></b> Regulation 1272/2008	Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336; EUH066 - Danger	ATP CLP00  <b>0,01 - &lt;0,1 %</b>
CAS: 34590-94-8 EC: 252-104-2 Index: Not relevant REACH: 01-2119450011-60-XXXX	<b>Dipropylene Glycol Methyl Ether<sup>(2)</sup></b> Regulation 1272/2008		Not classified  <b>&lt;0,01 %</b>

(1) Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

(2) Substance with a Union workplace exposure limit

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

#### Other information:

Identification	Specific concentration limit
Phosphoric acid CAS: 7664-38-2 EC: 231-633-2	% (w/w) >=25: Skin Corr. 1B - H314 10<= % (w/w) <25: Skin Irrit. 2 - H315 % (w/w) >=25: Eye Dam. 1 - H318 10<= % (w/w) <25: Eye Irrit. 2 - H319
maleic anhydride CAS: 108-31-6 EC: 203-571-6	% (w/w) >=0,001: Skin Sens. 1A - H317

Acute toxicity estimate for the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or as determined in accordance with Annex I to that Regulation:

\*\* Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

## KMK 1601 VETRORESINA PUTTY



### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS \*\* (continued)

Identification	Acute toxicity		Genus
styrene CAS: 100-42-5 EC: 202-851-5	LD50 oral	Not relevant	
	LD50 dermal	Not relevant	
	LC50 inhalation vapour	11,8 mg/L	Rat
Phosphoric acid CAS: 7664-38-2 EC: 231-633-2	LD50 oral	1250 mg/kg	Mouse
	LD50 dermal	Not relevant	
	LC50 inhalation vapour	Not relevant	
maleic anhydride CAS: 108-31-6 EC: 203-571-6	LD50 oral	1090 mg/kg	Rat
	LD50 dermal	Not relevant	
	LC50 inhalation vapour	Not relevant	

\*\* Changes with regards to the previous version

### SECTION 4: FIRST AID MEASURES

#### 4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

##### By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

##### By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

##### By eye contact:

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

##### By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

#### 4.2 Most important symptoms and effects, both acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

#### 4.3 Indication of any immediate medical attention and special treatment needed:

Not relevant

### SECTION 5: FIREFIGHTING MEASURES

#### 5.1 Extinguishing media:

##### Suitable extinguishing media:

Foam extinguisher (AB), Dry Chemical Powder (ABC) Fire Extinguisher, Carbon dioxide extinguisher (BC)

##### Unsuitable extinguishing media:

Water jet

#### 5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

#### 5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and Self Contained Breathing Apparatus. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

##### Additional provisions:

- CONTINUED ON NEXT PAGE -

## KMK 1601 VETRORESINA PUTTY



### SECTION 5: FIREFIGHTING MEASURES (continued)

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures:

##### For non-emergency personnel:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Remove any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

##### For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

#### 6.2 Environmental precautions:

It is recommended to avoid environmental spillage of both the product and its container.

#### 6.3 Methods and material for containment and cleaning up:

It is recommended:

Prevent the entrance of product in drains, sewers or watercourses. Absorb the spill using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. Collect the product in appropriate containers and manage it according to current legislation.

Spillages in water or sea:

Small spillages:

Contain spillage using barriers or similar equipment. Use suitable absorbents for collection and treat the waste in accordance with current regulations.

Large spillages:

If possible, contain spillage in open water using barriers or similar equipment. If this is not possible, try to control its spread and collect the product with suitable mechanical means. Always consult experts before using dispersants and make sure you have the necessary approvals if they are to be used. Treat the waste according to current regulations.

#### 6.4 Reference to other sections:

See sections 8 and 13.

### SECTION 7: HANDLING AND STORAGE

#### 7.1 Precautions for safe handling:

##### A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

##### B.- Technical recommendations for the prevention of fires and explosions

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 2014/34/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). Consult section 10 for conditions and materials that should be avoided.

##### C.- Technical recommendations on general occupational hygiene

PREGNANT WOMEN SHOULD NOT BE EXPOSED TO THIS PRODUCT. Transfer in designated areas that comply with the necessary safety conditions (emergency showers and eyewash stations in close proximity), using personal protection equipment, especially on the hands and face (See section 8). Limit manual transfers to small amounts only. Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

##### D.- Technical recommendations to prevent environmental risks

- CONTINUED ON NEXT PAGE -

## KMK 1601 VETRORESINA PUTTY



### SECTION 7: HANDLING AND STORAGE (continued)

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

#### 7.2 Conditions for safe storage, including any incompatibilities:

##### A.- Specific storage requirements

Minimum Temp.: 5 °C

Maximum Temp.: 35 °C

##### B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

#### 7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

Directive (EU) 2000/39, Directive 2004/37/EC, Directive (EU) 2006/15, Directive (EU) 2009/161, Directive (EU) 2017/164, Directive (EU) 2019/1831:

Identification		Occupational exposure limits		
Ethyl acetate		IOELV (8h)	200 ppm	734 mg/m <sup>3</sup>
CAS: 141-78-6	EC: 205-500-4	IOELV (STEL)	400 ppm	1468 mg/m <sup>3</sup>
Dipropylene Glycol Methyl Ether <sup>(1)</sup>		IOELV (8h)	50 ppm	308 mg/m <sup>3</sup>
CAS: 34590-94-8	EC: 252-104-2	IOELV (STEL)		
Phosphoric acid		IOELV (8h)		1 mg/m <sup>3</sup>
CAS: 7664-38-2	EC: 231-633-2	IOELV (STEL)		2 mg/m <sup>3</sup>

<sup>(1)</sup> Skin

#### DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
styrene	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	406 mg/kg	Not relevant
	Inhalation	289 mg/m <sup>3</sup>	306 mg/m <sup>3</sup>	85 mg/m <sup>3</sup>	Not relevant
2,2'-(m-tolylimino)diethanol	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	0,23 mg/kg	Not relevant
	Inhalation	0,8 mg/m <sup>3</sup>	Not relevant	0,8 mg/m <sup>3</sup>	Not relevant
Phosphoric acid	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
	Inhalation	Not relevant	2 mg/m <sup>3</sup>	10,7 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>
maleic anhydride	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
	Inhalation	0,2 mg/m <sup>3</sup>	0,2 mg/m <sup>3</sup>	0,081 mg/m <sup>3</sup>	0,081 mg/m <sup>3</sup>
Ethyl acetate	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	63 mg/kg	Not relevant
	Inhalation	1468 mg/m <sup>3</sup>	1468 mg/m <sup>3</sup>	734 mg/m <sup>3</sup>	734 mg/m <sup>3</sup>
Dipropylene Glycol Methyl Ether	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	283 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	308 mg/m <sup>3</sup>	Not relevant

#### DNEL (General population):

- CONTINUED ON NEXT PAGE -

## KMK 1601 VETRORESINA PUTTY



### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification	Short exposure		Long exposure	
	Systemic	Local	Systemic	Local
styrene CAS: 100-42-5 EC: 202-851-5	Oral	Not relevant	Not relevant	2,1 mg/kg
	Dermal	Not relevant	Not relevant	343 mg/kg
	Inhalation	174,25 mg/m <sup>3</sup>	182,75 mg/m <sup>3</sup>	10,2 mg/m <sup>3</sup>
2,2'-(m-tolylimino)diethanol CAS: 91-99-6 EC: 202-114-8	Oral	0,14 mg/kg	Not relevant	0,14 mg/kg
	Dermal	Not relevant	Not relevant	0,07 mg/kg
	Inhalation	0,24 mg/m <sup>3</sup>	Not relevant	0,24 mg/m <sup>3</sup>
Phosphoric acid CAS: 7664-38-2 EC: 231-633-2	Oral	Not relevant	Not relevant	0,1 mg/kg
	Dermal	Not relevant	Not relevant	Not relevant
	Inhalation	Not relevant	Not relevant	4,57 mg/m <sup>3</sup>
Ethyl acetate CAS: 141-78-6 EC: 205-500-4	Oral	Not relevant	Not relevant	4,5 mg/kg
	Dermal	Not relevant	Not relevant	37 mg/kg
	Inhalation	734 mg/m <sup>3</sup>	734 mg/m <sup>3</sup>	367 mg/m <sup>3</sup>
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	Oral	Not relevant	Not relevant	36 mg/kg
	Dermal	Not relevant	Not relevant	121 mg/kg
	Inhalation	Not relevant	Not relevant	37,2 mg/m <sup>3</sup>

#### PNEC:

Identification	STP	5 mg/L	Fresh water	0,028 mg/L
styrene CAS: 100-42-5 EC: 202-851-5	Soil	0,2 mg/kg	Marine water	0,014 mg/L
	Intermittent	0,04 mg/L	Sediment (Fresh water)	0,614 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0,307 mg/kg
2,2'-(m-tolylimino)diethanol CAS: 91-99-6 EC: 202-114-8	STP	81,7 mg/L	Fresh water	0,107 mg/L
	Soil	0,37 mg/kg	Marine water	0,011 mg/L
	Intermittent	1,07 mg/L	Sediment (Fresh water)	2,16 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0,22 mg/kg
maleic anhydride CAS: 108-31-6 EC: 203-571-6	STP	44,6 mg/L	Fresh water	0,038 mg/L
	Soil	0,037 mg/kg	Marine water	0,004 mg/L
	Intermittent	0,379 mg/L	Sediment (Fresh water)	0,296 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0,03 mg/kg
Ethyl acetate CAS: 141-78-6 EC: 205-500-4	STP	650 mg/L	Fresh water	0,24 mg/L
	Soil	0,148 mg/kg	Marine water	0,024 mg/L
	Intermittent	1,65 mg/L	Sediment (Fresh water)	1,15 mg/kg
	Oral	0,2 g/kg	Sediment (Marine water)	0,115 mg/kg
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	STP	4168 mg/L	Fresh water	19 mg/L
	Soil	2,74 mg/kg	Marine water	1,9 mg/L
	Intermittent	190 mg/L	Sediment (Fresh water)	70,2 mg/kg
	Oral	Not relevant	Sediment (Marine water)	7,02 mg/kg

#### 8.2 Exposure controls:

##### A.- Individual protection measures, such as personal protective equipment

In accordance with the order of importance to control professional exposure (Directive 98/24/EC) it is recommended to use localized extraction in the work area as a collective protection measure to avoid exceeding the occupational exposure limits. In case of using personal protective equipment it should have CE marking in accordance with Directive 2016/425/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

##### B.- Respiratory protection

- CONTINUED ON NEXT PAGE -

## KMK 1601 VETRORESINA PUTTY



### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Filter mask for gases and vapours (Filter type: A)		EN 405:2002+A1:2010	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

#### C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Chemical protective gloves (Material: Linear low-density polyethylene (LLDPE), Breakthrough time: > 480 min, Thickness: 0.062 mm)		EN ISO 21420:2020	Replace the gloves at any sign of deterioration.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

#### D.- Eye and face protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Face shield		EN 166:2002 UNE-EN ISO 18526-1 al 4:2020 UNE-EN ISO 18526-1 al 4:2020 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

#### E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties		EN 1149-1,2,3 EN 13034:2005+A1:2009 EN ISO 13982-1:2005/A1:2011 EN ISO 6529:2013 EN ISO 6530:2005 EN ISO 13688:2013 EN 464:1995	For professional use only. Clean periodically according to the manufacturer's instructions.
	Safety footwear for protection against chemical risk, with antistatic and heat resistant properties		EN ISO 13287:2020 EN ISO 20345:2022 EN 13832-1:2019	Replace boots at any sign of deterioration.

#### F.- Additional emergency measures

It is advised to implement additional emergency equipments in workplaces that are particularly exposed to the product or in situations where risk assessments highlight the necessity of such equipments.

Emergency measure	Standards	Emergency measure	Standards
	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011		DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

#### Environmental exposure controls:

To comply with environmental protection regulations, it is recommended to prevent any spillage of the product and its container. For more detailed information, please refer to subsection 7.1.D.

#### Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	19,07 % weight
V.O.C. density at 20 °C:	305,04 kg/m <sup>3</sup> (305,04 g/L)
Average carbon number:	8,01
Average molecular weight:	104,15 g/mol

With regard to Directive 2004/42/EC, this product which is ready to use has the following characteristics:

V.O.C. density at 20 °C:	37 kg/m <sup>3</sup> (37 g/L)
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- CONTINUED ON NEXT PAGE -

## KMK 1601 VETRORESINA PUTTY



### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

EU limit for the product (Cat. B.B): 250 g/L (2010)

Components: Not relevant

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

##### Appearance:

Physical state at 20 °C:	Liquid
Appearance:	Paste
Colour:	Grey
Odour:	Characteristic
Odour threshold:	Not relevant *

##### Volatility:

Boiling point at atmospheric pressure:	145 °C
Vapour pressure at 20 °C:	701 Pa
Vapour pressure at 50 °C:	3656,98 Pa (3,66 kPa)
Evaporation rate at 20 °C:	Not relevant *

##### Product description:

Density at 20 °C:	1600 kg/m <sup>3</sup>
Relative density at 20 °C:	1,6
Dynamic viscosity at 20 °C:	6000000 cP
Kinematic viscosity at 20 °C:	>20,5 mm <sup>2</sup> /s
Kinematic viscosity at 40 °C:	>20,5 mm <sup>2</sup> /s
Concentration:	Not relevant *
pH:	Not relevant *
Vapour density at 20 °C:	Not relevant *
Partition coefficient n-octanol/water 20 °C:	Not relevant *
Solubility in water at 20 °C:	Not relevant *
Solubility properties:	Immiscible
Decomposition temperature:	Not relevant *
Melting point/freezing point:	Not relevant *

##### Flammability:

Flash Point:	32 °C
Flammability (solid, gas):	Not relevant *
Autoignition temperature:	265 °C
Lower flammability limit:	Not relevant *
Upper flammability limit:	Not relevant *

##### Particle characteristics:

Median equivalent diameter:	Not relevant *
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#### 9.2 Other information:

##### Information with regard to physical hazard classes:

Explosive properties:	Not relevant *
Oxidising properties:	Not relevant *
Corrosive to metals:	Not relevant *

\*Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -

## KMK 1601 VETRORESINA PUTTY



### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Heat of combustion: Not relevant \*

Aerosols-total percentage (by mass) of flammable components: Not relevant \*

**Other safety characteristics:**

Surface tension at 20 °C: Not relevant \*

Refraction index: Not relevant \*

\*Not relevant due to the nature of the product, not providing information property of its hazards.

### SECTION 10: STABILITY AND REACTIVITY

**10.1 Reactivity:**

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

**10.2 Chemical stability:**

Chemically stable under the indicated conditions of storage, handling and use.

**10.3 Possibility of hazardous reactions:**

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

**10.4 Conditions to avoid:**

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

**10.5 Incompatible materials:**

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

**10.6 Hazardous decomposition products:**

Contains substances highly reactive and can auto-polymerize as a result of internal peroxide accumulation. The peroxides formed in these reactions are extremely shock- and heat-sensitive.

### SECTION 11: TOXICOLOGICAL INFORMATION \*\*

**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:**

The experimental information related to the toxicological properties of the product itself is not available

Contains glycols. It is recommended not to breathe the vapours for prolonged periods of time due to the possibility of effects that are hazardous to the health .

**Dangerous health implications:**

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Prolonged inhalation of the product is corrosive to mucous membranes and the upper respiratory tract

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: Produces eye damage after contact.

\*\* Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

## KMK 1601 VETRORESINA PUTTY



### SECTION 11: TOXICOLOGICAL INFORMATION \*\* (continued)

**D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):**

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Suspected of damaging the unborn child.

**E- Sensitizing effects:**

- Respiratory: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous with sensitising effects. For more information see section 3.
- Skin: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

**F- Specific target organ toxicity (STOT) - single exposure:**

Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.

**G- Specific target organ toxicity (STOT)-repeated exposure:**

- Specific target organ toxicity (STOT)-repeated exposure: Serious health effects in the case of prolonged inhalation, including death, serious functional disorders or morphological changes of toxicological importance. Organs affected: Ear.
- Skin: Based on available data, the classification criteria are not met. However, it does contain substances which are classified as dangerous due to repetitive exposure. For more information see section 3.

**H- Aspiration hazard:**

Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

**Other information:**

Not relevant

**Specific toxicology information on the substances:**

Identification	Acute toxicity		Genus
styrene CAS: 100-42-5 EC: 202-851-5	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation vapour	11,8 mg/L	Rat
2,2'-(m-tolylimino)diethanol CAS: 91-99-6 EC: 202-114-8	LD50 oral	500 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation vapour	>20 mg/L	
Phosphoric acid CAS: 7664-38-2 EC: 231-633-2	LD50 oral	1250 mg/kg	Mouse
	LD50 dermal	2740 mg/kg	Rabbit
	LC50 inhalation dust	>5 mg/L	
maleic anhydride CAS: 108-31-6 EC: 203-571-6	LD50 oral	1090 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation dust	>5 mg/L	
Ethyl acetate CAS: 141-78-6 EC: 205-500-4	LD50 oral	4100 mg/kg	Rat
	LD50 dermal	20000 mg/kg	Rabbit
	LC50 inhalation vapour	>20 mg/L	
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	LD50 oral	>5000 mg/kg	Rat
	LD50 dermal	9510 mg/kg	Rabbit
	LC50 inhalation vapour	>20 mg/L	

**Acute Toxicity Estimate (ATE mix):**

ATE mix	Ingredient(s) of unknown toxicity
Oral	>2000 mg/kg (Calculation method)
Dermal	>2000 mg/kg (Calculation method)
LC50 inhalation vapour	63,01 mg/L (4 h) (Calculation method)

**11.2 Information on other hazards:**

**Endocrine disrupting properties**

\*\* Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

## KMK 1601 VETRORESINA PUTTY



### SECTION 11: TOXICOLOGICAL INFORMATION \*\* (continued)

Endocrine-disrupting properties: The product does not meet the criteria.

#### Other information

Not relevant

\*\* Changes with regards to the previous version

### SECTION 12: ECOLOGICAL INFORMATION \*\*

The experimental information related to the eco-toxicological properties of the product itself is not available

Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

#### 12.1 Toxicity:

##### Acute toxicity:

Identification	Concentration		Species	Genus
styrene CAS: 100-42-5 EC: 202-851-5	LC50	64,7 mg/L (96 h)	Carassius auratus	Fish
	EC50	4,7 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	67 mg/L (192 h)	Microcystis aeruginosa	Algae
Ethyl acetate CAS: 141-78-6 EC: 205-500-4	LC50	230 mg/L (96 h)	Pimephales promelas	Fish
	EC50	717 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	3300 mg/L (48 h)	Scenedesmus subspicatus	Algae
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	LC50	10000 mg/L (96 h)	Pimephales promelas	Fish
	EC50	1919 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Not relevant		

##### Chronic toxicity:

Identification	Concentration		Species	Genus
styrene CAS: 100-42-5 EC: 202-851-5	NOEC	Not relevant		
	NOEC	1,01 mg/L	Daphnia magna	Crustacean
Ethyl acetate CAS: 141-78-6 EC: 205-500-4	NOEC	9,65 mg/L	Pimephales promelas	Fish
	NOEC	2,4 mg/L	Daphnia magna	Crustacean
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	NOEC	Not relevant		
	NOEC	0,5 mg/L	Daphnia magna	Crustacean

#### 12.2 Persistence and degradability:

##### Substance-specific information:

Identification	Degradability		Biodegradability	
	BOD5	COD	Concentration	100 mg/L
styrene CAS: 100-42-5 EC: 202-851-5	1,96 g O2/g	2,8 g O2/g	Period	14 days
	0,7		% Biodegradable	100 %
maleic anhydride CAS: 108-31-6 EC: 203-571-6	Not relevant		Concentration	33,33 mg/L
	Not relevant		Period	29 days
	Not relevant		% Biodegradable	98,19 %
Ethyl acetate CAS: 141-78-6 EC: 205-500-4	1,36 g O2/g	1,69 g O2/g	Concentration	100 mg/L
	0,8		Period	14 days
			% Biodegradable	83 %
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	Not relevant		Concentration	Not relevant
	0 g O2/g		Period	28 days
	Not relevant		% Biodegradable	73 %

#### 12.3 Bioaccumulative potential:

##### Substance-specific information:

Identification	Bioaccumulation potential	
styrene	BCF	14
CAS: 100-42-5	Pow Log	2.95
EC: 202-851-5	Potential	Low

\*\* Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

## KMK 1601 VETRORESINA PUTTY



### SECTION 12: ECOLOGICAL INFORMATION \*\* (continued)

Identification		Bioaccumulation potential	
maleic anhydride		BCF	
CAS: 108-31-6		Pow Log	-2.61
EC: 203-571-6		Potential	
Ethyl acetate		BCF	30
CAS: 141-78-6		Pow Log	0.73
EC: 205-500-4		Potential	Moderate
Dipropylene Glycol Methyl Ether		BCF	1
CAS: 34590-94-8		Pow Log	-0.06
EC: 252-104-2		Potential	Low

#### 12.4 Mobility in soil:

Identification		Absorption/desorption		Volatility	
styrene	Koc	Not relevant	Henry	Not relevant	
	Conclusion	Not relevant	Dry soil	Not relevant	
	Surface tension	3,21E-2 N/m (25 °C)	Moist soil	Not relevant	
maleic anhydride	Koc	42	Henry	0E+0 Pa·m <sup>3</sup> /mol	
	Conclusion	Very High	Dry soil	Not relevant	
	Surface tension	1,673E-2 N/m (250,21 °C)	Moist soil	Not relevant	
Ethyl acetate	Koc	59	Henry	13,58 Pa·m <sup>3</sup> /mol	
	Conclusion	Very High	Dry soil	Yes	
	Surface tension	2,324E-2 N/m (25 °C)	Moist soil	Yes	

#### 12.5 Results of PBT and vPvB assessment:

Product does not meet PBT/vPvB criteria

#### 12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product does not meet the criteria.

#### 12.7 Other adverse effects:

Not described

\*\* Changes with regards to the previous version

### SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances	Hazardous

#### Type of waste (Regulation (EU) No 1357/2014):

HP3 Flammable, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP10 Toxic for reproduction, HP4 Irritant — skin irritation and eye damage

#### Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-hazardous residue. Waste should not be disposed of to drains. See paragraph 6.2.

#### Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

### SECTION 14: TRANSPORT INFORMATION

#### Transport of dangerous goods by land:

With regard to ADR 2023 and RID 2023:

- CONTINUED ON NEXT PAGE -

## KMK 1601 VETRORESINA PUTTY



### SECTION 14: TRANSPORT INFORMATION (continued)



<b>14.1 UN number or ID number:</b>	UN3269
<b>14.2 UN proper shipping name:</b>	POLYESTER RESIN KIT, liquid base material
<b>14.3 Transport hazard class(es):</b>	3
Labels:	3
<b>14.4 Packing group:</b>	III
<b>14.5 Environmental hazards:</b>	No
<b>14.6 Special precautions for user</b>	
Special regulations:	236, 340
Tunnel restriction code:	E
Physico-Chemical properties:	see section 9
Limited quantities:	5 L
<b>14.7 Maritime transport in bulk according to IMO instruments:</b>	Not relevant

#### Transport of dangerous goods by sea:

With regard to IMDG 41-22:



<b>14.1 UN number or ID number:</b>	UN3269
<b>14.2 UN proper shipping name:</b>	POLYESTER RESIN KIT, liquid base material
<b>14.3 Transport hazard class(es):</b>	3
Labels:	3
<b>14.4 Packing group:</b>	III
<b>14.5 Marine pollutant:</b>	No
<b>14.6 Special precautions for user</b>	
Special regulations:	340, 236
EmS Codes:	F-E, S-D
Physico-Chemical properties:	see section 9
Limited quantities:	5 L
Segregation group:	Not relevant
<b>14.7 Maritime transport in bulk according to IMO instruments:</b>	Not relevant

#### Transport of dangerous goods by air:

With regard to IATA/ICAO 2024:



<b>14.1 UN number or ID number:</b>	UN3269
<b>14.2 UN proper shipping name:</b>	POLYESTER RESIN KIT, liquid base material
<b>14.3 Transport hazard class(es):</b>	3
Labels:	3
<b>14.4 Packing group:</b>	III
<b>14.5 Environmental hazards:</b>	No
<b>14.6 Special precautions for user</b>	
Physico-Chemical properties:	see section 9
<b>14.7 Maritime transport in bulk according to IMO instruments:</b>	Not relevant

### SECTION 15: REGULATORY INFORMATION

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

- Article 95, REGULATION (EU) No 528/2012: Not relevant
- Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Not relevant
- Regulation (EU) 2019/1021 on persistent organic pollutants: Not relevant
- Regulation (EU) No 2024/590, about substances that deplete the ozone layer: Not relevant
- REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Not relevant
- Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Not relevant

#### Seveso III:

- CONTINUED ON NEXT PAGE -

## KMK 1601 VETRORESINA PUTTY



### SECTION 15: REGULATORY INFORMATION (continued)

Section	Description	Lower-tier requirements	Upper-tier requirements
P5c	FLAMMABLE LIQUIDS	5000	50000

**Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....):**

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Laboral exposure to respirable crystalline silica must be controlled in accordance with Directive (EU) 2022/431, of the European Parliament and of the Council, of March 9, 2022, amending Directive 2004/37/EC, relating to the protection of workers against risks related to exposure to carcinogens or mutagens during work.

**Specific provisions in terms of protecting people or the environment:**

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

**Other legislation:**

The product could be affected by sectorial legislation

#### 15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

### SECTION 16: OTHER INFORMATION \*\*

**Legislation related to safety data sheets:**

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

**Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:**

COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3, SECTION 11, SECTION 12):

- New declared substances  
maleic anhydride (108-31-6)

- Removed substances  
Cobalt bis(2-ethylhexanoate) (136-52-7)

Substances that contribute to the classification (SECTION 2):

- New declared substances  
maleic anhydride (108-31-6)

CLP Regulation (EC) No 1272/2008 (SECTION 2, SECTION 16):

- Hazard statements
- Supplementary information
- Substances contained in EUH208:
  - Removed substances  
Cobalt bis(2-ethylhexanoate) (136-52-7)

**Texts of the legislative phrases mentioned in section 2:**

H315: Causes skin irritation.

H361d: Suspected of damaging the unborn child.

H372: Causes damage to organs through prolonged or repeated exposure (Inhalation). Organs affected: Ear.

H317: May cause an allergic skin reaction.

H226: Flammable liquid and vapour.

H319: Causes serious eye irritation.

**Texts of the legislative phrases mentioned in section 3:**

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

**CLP Regulation (EC) No 1272/2008:**

\*\* Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

## KMK 1601 VETRORESINA PUTTY



### SECTION 16: OTHER INFORMATION \*\* (continued)

Acute Tox. 4: H302 - Harmful if swallowed.  
 Acute Tox. 4: H332 - Harmful if inhaled.  
 Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.  
 Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.  
 Eye Dam. 1: H318 - Causes serious eye damage.  
 Eye Irrit. 2: H319 - Causes serious eye irritation.  
 Flam. Liq. 2: H225 - Highly flammable liquid and vapour.  
 Flam. Liq. 3: H226 - Flammable liquid and vapour.  
 Met. Corr. 1: H290 - May be corrosive to metals.  
 Repr. 2: H361d - Suspected of damaging the unborn child.  
 Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.  
 Skin Irrit. 2: H315 - Causes skin irritation.  
 Skin Sens. 1A: H317 - May cause an allergic skin reaction.  
 Skin Sens. 1B: H317 - May cause an allergic skin reaction.  
 STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure (Inhalation).  
 STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral).  
 STOT SE 3: H335 - May cause respiratory irritation.  
 STOT SE 3: H336 - May cause drowsiness or dizziness.

**Classification procedure:**

Skin Irrit. 2: Calculation method  
 Repr. 2: Calculation method  
 STOT RE 1: Calculation method  
 Skin Sens. 1A: Calculation method  
 Flam. Liq. 3: Calculation method (2.6.4.3)  
 Eye Irrit. 2: Calculation method

**Advice related to training:**

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

**Principal bibliographical sources:**

<http://echa.europa.eu>  
<http://eur-lex.europa.eu>

**Abbreviations and acronyms:**

ADR: European agreement concerning the international carriage of dangerous goods by road  
 IMDG: International maritime dangerous goods code  
 IATA: International Air Transport Association  
 ICAO: International Civil Aviation Organisation  
 COD: Chemical Oxygen Demand  
 BOD5: 5day biochemical oxygen demand  
 BCF: Bioconcentration factor  
 LD50: Lethal Dose 50  
 LC50: Lethal Concentration 50  
 EC50: Effective concentration 50  
 LogPOW: Octanol/water partition coefficient  
 Koc: Partition coefficient of organic carbon  
 UFI: unique formula identifier  
 IARC: International Agency for Research on Cancer

\*\* Changes with regards to the previous version

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -