



PIGAL s.r.l

Revision nr. 4

Dated 15/09/2017

Printed on 17/10/2017

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**SIMP FIX**

## Safety data sheet

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

#### 1.1. Product identifier

Product code C00165-06070 e seg.  
Product name SIMP FIX

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

Intended use One component, methoxy silane-based, adhesive for generic industrial applications.

#### 1.3. Details of the supplier of the safety data sheet

Name PIGAL s.r.l.  
Full address Via G. Rossa, 2  
District and Country 40053 VALSAMOGGIA - Crespellano (BO)  
ITALIA  
tel. +39 051969068  
fax +39 051969353

e-mail address of the competent person

responsible for the Safety Data Sheet

health.safety@pigal.it; pigalab@pigal.it

#### 1.4. Emergency telephone number

+39 051969068 ore ufficio/office hours (8.30-13; 14-17.30) 118 (contattare il centro antiveneni più vicino)/please contact your near local poison control center

### 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 EC Regulation 1272/2008 (CLP).

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.

Hazard classification and indication:

#### 2.2. Label elements.

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms: --

Signal words: --

Hazard statements:

**EUH210**

Safety data sheet available on request.

**EUH208**

Contains:

N-[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE.

May produce an allergic reaction.

**SIMP FIX**

Precautionary statements:

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**2.3. Other hazards.**

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

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

Information not relevant.

**3.2. Mixtures.**

Contains:

**Identification.****Conc. %.****Classification 1272/2008 (CLP).****TRIETHYLPHOSPHATE**

CAS. 78-40-0

4 - 4,5

Acute Tox. 4 H302, Eye Irrit.  
2 H319

EC. 201-114-5

INDEX. 015-013-00-7

Reg. no. 01-2119492852-28-0000

**VINYLTRIMETHOXYSILANE.**

CAS. 2768-02-7

2,5 - 3

Flam. Liq. 3 H226, Acute Tox.  
4 H332

EC. 220-449-8

INDEX. -

Reg. no. 01-2119513215-52-0003

**N-[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE.**

CAS. 1760-24-3

0,8 - 0,9

Eye Dam. 1 H318, Skin Sens.  
1B H317

EC. 217-164-6

INDEX. -

Reg. no. 01-2119970215-39-XXXX

Note: Upper limit is not included into the range.

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

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

EYES: remove immediately with a clean cloth or paper and wash affected area with soap and water.

SKIN: take off contaminated clothing. Wash immediately with plenty of water. If irritation persists, consult a doctor. Wash contaminated clothing before



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reuse.

INHALATION: In case of feeling unwell remove patient to fresh air and seek medical attention if breathing difficulty succeeding.

INGESTION: eject the product and rinse mouth with water.

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

Prolonged contact may cause allergic reactions.

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

Consult a doctor if symptoms are severe or in the case of persistent irritation of the skin.

## **SECTION 5. Firefighting measures.**

### **5.1. Extinguishing media.**

#### **SUITABLE EXTINGUISHING EQUIPMENT**

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

#### **UNSUITABLE EXTINGUISHING EQUIPMENT**

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

### **5.2. Special hazards arising from the substance or mixture.**

#### **HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

Excess pressure may form in containers exposed to fire at a risk of explosion. 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.

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

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

Store only in the original container. Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany):  
10

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

Information not available.

## SECTION 8. Exposure controls/personal protection.

### 8.1. Control parameters.

Regulatory References:

DEU	Deutschland	MAK-und BAT-Werte-Liste 2012
ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2015
FRA	France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
GBR	United Kingdom	EH40/2005 Workplace exposure limits
GRC	Ελλάδα	ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ -ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 - 9 Φεβρουαρίου 2012

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HRV	Hrvatska	NN13/09 - Ministarstvo gospodarstva, rada i poduzetništva
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NLD	Nederland	Databank of the social and Economic Concil of Netherlands (SER) Values, AF 2011:18
POL	Polska	ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 16 grudnia 2011r
SWE	Sverige	Occupational Exposure Limit Values, AF 2011:18
EU	OEL EU	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
	TLV-ACGIH	ACGIH 2014

## DIISONONYL PHTHALATE

### Threshold Limit Value.

Type	Country	TWA/8h	STEL/15min
		mg/m3	ppm
WEL	GBR	5	

## TRIETHYLPHOSPHATE

### Predicted no-effect concentration - PNEC.

Normal value in fresh water	0,632	mg/l
Normal value in marine water	0,0632	mg/l
Normal value for fresh water sediment	4,83	mg/kg/d
Normal value of STP microorganisms	298,5	mg/l
Normal value for the terrestrial compartment	0,596	mg/kg/d

### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers. Acute local	Acute systemic	Chronic local	Chronic systemic	Effects on workers Acute local	Acute systemic	Chronic local	Chronic systemic
Oral.	VND	13,3 mg/kg/d	VND	1,66 mg/kg/d				
Inhalation.	VND	23,12 mg/m3	VND	2,89 mg/m3	VND	93,6 mg/m3	VND	11,7 mg/m3
Skin.	VND	13,3 mg/m3	VND	1,66 mg/m3	VND	26,6 mg/kg/d	VND	3,33 mg/kg/d

## VINYLTRIMETHOXYSILANE.

### Predicted no-effect concentration - PNEC.

Normal value in fresh water	0,34	mg/l
Normal value in marine water	0,034	mg/l
Normal value for fresh water sediment	0,27	mg/kg
Normal value for water, intermittent release	3,4	mg/l
Normal value of STP microorganisms	110	mg/l
Normal value for the terrestrial compartment	0,046	mg/kg

### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers. Acute local	Acute systemic	Chronic local	Chronic systemic	Effects on workers Acute local	Acute systemic	Chronic local	Chronic systemic
Oral.			VND	0,3 mg/kg/d				
Inhalation.	VND	93,4 mg/m3	VND	1,04 mg/m3			VND	4,9 mg/m3
Skin.	VND	26,9 mg/kg/d	VND	0,3 mg/kg/d			VND	0,69 mg/kg/d


## BIS(2,2,6,6-TETRAMETHYL-4-PIPERIDYL)SEBACATE

### Predicted no-effect concentration - PNEC.

Normal value in fresh water	0,005	mg/l
Normal value in marine water	0,0005	mg/l
Normal value for fresh water sediment	8,02	mg/kg
Normal value for marine water sediment	0,802	mg/kg
Normal value of STP microorganisms	1	mg/l
Normal value for the terrestrial compartment	1,6	mg/kg

### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers. Acute local	Acute systemic	Chronic local	Chronic	Effects on workers Acute local	Acute	Chronic local	Chronic
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				systemic		systemic		systemic
Oral.	VND	1 mg/kg	VND	1 mg/kg				
Inhalation.	VND	1,4 mg/m3	VND	1,4 mg/m3	VND	5,6 mg/m3	VND	5,6 mg/m3
Skin.	VND	1 mg/kg	VND	1 mg/kg	VND	2 mg/kg	VND	2 mg/kg

BUMETRIZOLE					
Threshold Limit Value.					
Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
TLV-ACGIH		10			

METHANOL					
Threshold Limit Value.					
Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
AGW	DEU	270	200	1080	800
MAK	DEU	270	200	1080	800
VLA	ESP	266	200		
VLEP	FRA	260	200	1300	1000
WEL	GBR	266	200	333	250
TLV	GRC	260	200	325	250
GVI	HRV	260	200		
TLV	ITA	260	200		
OEL	NLD	133	100		
NDS	POL	100		300	
MAK	SWE	250	200	350	250
OEL	EU	260	200		
TLV-ACGIH		262	200	328	250

Legend:

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

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

## 8.2. Exposure controls.

Comply with the safety measures usually applied when handling chemical substances.

### HAND PROTECTION

Protect your hands with work gloves, category III (ref. standard EN 374). For the final choice of material you need to assess the type of use. In case of contact for the short term or as protection against splashes, use gloves made of nitrile (0.3mm thickness, permeation time >480 min.). In the event of continued exposure use butyl rubber gloves (0.4mm thickness, permeation time > 480 min.). Contaminated gloves should be removed.

### SKIN PROTECTION

None required.

### EYE PROTECTION

None required.

### ENVIRONMENTAL EXPOSURE CONTROLS.

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

## SECTION 9. Physical and chemical properties.

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

Appearance	paste
Colour	various
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.	Not applicable.
Evaporation rate	Not available.
Flammability (solid, gas)	not flammable
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.	1,63 Kg/l
Solubility	insoluble in water
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature.	Not available.
Decomposition temperature.	Not available.
Viscosity	120000 - 200000 cps
Explosive properties	Not available.
Oxidising properties	Not available.

### 9.2. Other information.

VOC (Directive 2010/75/EC) :	4,00 %
VOC (volatile carbon) :	Not available.

## SECTION 10. Stability and reactivity.

### 10.1. Reactivity.

Product reacts slowly with water (ambient humidity) turning into a rubbery solid and producing METHANOL.

### 10.2. Chemical stability.

Product stable under normal conditions of use and storage.

### 10.3. Possibility of hazardous reactions.

Under conditions of normal use and storage not hazardous reactions are foreseeable.

**SIMP FIX****10.4. Conditions to avoid.**

Humidity.

**10.5. Incompatible materials.**

Water.

**10.6. Hazardous decomposition products.**

Carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

**SECTION 11. Toxicological information.****11.1. Information on toxicological effects.**

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

This product contains sensitizing substance/s and may cause allergic reactions.

**VINYLTRIMETHOXYSILANE.**

LD50 (Oral). 7178 mg/kg Rattus sp.

LD50 (Dermal). 3200 mg/kg Oryctolagus sp.

LC50 (Inhalation). 16,8 mg/l/4h Rattus sp.

**N-[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE.**

LD50 (Oral). 2704 mg/kg Rattus sp.

LD50 (Dermal). > 2009 mg/kg Rattus sp.

LC50 (Inhalation). 1,96 mg/l Rattus sp.

**TRIETHYLPHOSPHATE**

LD50 (Oral). 1600 mg/kg Rattus sp.

LD50 (Dermal). > 20000 mg/kg Oryctolagus sp.

LC50 (Inhalation). > 8817 mg/m<sup>3</sup> Rattus sp.

**SECTION 12. Ecological information.**

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

**12.1. Toxicity.****VINYLTRIMETHOXYSILANE.**

LC50 - for Fish.

191 mg/l/96h Oncorhynchus mykiss

Chronic NOEC for Algae / Aquatic Plants.

25 mg/l Selenastrum capricornutum



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N-[3-(TRIMETHOXSILYL)PROPYL]ETHYLENEDIAMINE.

LC50 - for Fish.

168 mg/l/96h Pimephales promelas

EC50 - for Algae / Aquatic Plants.

5 mg/l/72h

TRIETHYLPHOSPHATE

LC50 - for Fish.

> 100 mg/l/96h Danio rerio

EC50 - for Algae / Aquatic Plants.

900 mg/l/72h Desmodesmus subspicatus

Chronic NOEC for Crustacea.

31,6 mg/l 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 13. Disposal considerations.****13.1. Waste treatment methods.**

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

**SECTION 14. Transport information.****14.1. UN number.**

Not applicable.



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**14.2. UN proper shipping name.**

Not applicable.

**14.3. Transport hazard class(es).**

Not applicable.

**14.4. Packing group.**

Not applicable.

**14.5. Environmental hazards.**

Not applicable.

**14.6. Special precautions for user.**

Not applicable.

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code.**

Information not relevant.

**SECTION 15. Regulatory information.**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture.**

Seveso category. None.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

Contained substance.

Point.	52	DIISONONYL PHTHALATE
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Substances in Candidate List (Art. 59 REACH).

None.

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Substances subject to authorisation (Annex XIV REACH).

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls.

Information not available.

German regulation on the classification of substances hazardous to water (VwVwS 2005).

WGK 1: Low hazard to waters

**15.2. Chemical safety assessment.**

No chemical safety assessment has been processed for the mixture and the substances it contains.

**SECTION 16. Other information.**

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Sens. 1B</b>	Skin sensitization, category 1B
<b>H226</b>	Flammable liquid and vapour.
<b>H302</b>	Harmful if swallowed.
<b>H332</b>	Harmful if inhaled.
<b>H318</b>	Causes serious eye damage.
<b>H319</b>	Causes serious eye irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>EUH210</b>	Safety data sheet available on request.

**LEGEND:**

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number

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- 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
- WGK: Water hazard classes (German).

**GENERAL BIBLIOGRAPHY**

1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EU) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
  4. Regulation (EU) 2015/830 of the European Parliament
  5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
  9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- The Merck Index. - 10th Edition
  - Handling Chemical Safety
  - INRS - Fiche Toxicologique (toxicological sheet)
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
  - 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:

09.