

Revision nr. 8

Dated 6/3/2015

Printed on 01/02/2016

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# TAK cyanoacrylate adhesives

# Safety data sheet

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

1.1. Product identifier

Code: C00029.-(01560 e seg.)
Product name TAK cyanoacrylate adhesives

1.2. Relevant identified uses of the substance or mixture and uses advised against Intended use Cyanoacrylate liquid adhesive for general use and DIY.

1.3. Details of the supplier of the safety data sheet

Name PIGAL s.p.a. 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

For urgent inquiries refer to +39 051969068 ore ufficio (8.30-13; 14-17.30) 118 (contattare il centro antiveleni più

vicino)

### **SECTION 2. Hazards identification.**

#### 2.1. Classification of the substance or mixture.

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

### 2.1.1. Regulation 1272/2008 (CLP) and following amendments and adjustments.

Hazard classification and indication:

 Eye Irrit. 2
 H319

 Skin Irrit. 2
 H315

 STOT SE 3
 H335

#### 2.1.2. 67/548/EEC and 1999/45/EC Directives and following amendments and adjustments.

Danger Symbols:

Xi

R phrases:

36/37/38

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

#### 2.2. Label elements.



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

Hazard pictograms:



Signal words: Warning

Hazard statements:

H319 Causes serious eye irritation. H315 Causes skin irritation.

H335 May cause respiratory irritation.

**EUH202** Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.

**EUH208** Contains:

**HYDROQUINONE** 

May produce an allergic reaction.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P261 Avoid breathing vapours.

P262 Do not get in eyes, on skin, or on clothing. P271 Use only outdoors or in a well-ventilated area. P302+P352 IF ON SKIN: Wash with plenty of soap and water.

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

rinsing.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Contains: Ethyl-2-cyanoacrylate

2.3. Other hazards.

Information not available.

### **SECTION 3. Composition/information on ingredients.**

#### 3.1. Substances.

Information not relevant.

3.2. Mixtures.

Contains:

Conc. %. Classification 67/548/EEC. Classification 1272/2008 (CLP). Identification. Ethyl-2-cyanoacrylate

Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335 85 - 100 CAS. 7085-85-0 Xi R36/37/38



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INDEX. 607-236-00-9

Reg. no. 01-2119527766-29

**HYDROQUINONE** 

FC. 230-391-5

CAS. 123-31-9

0.1 - 1

Carc. Cat. 3 R40, Muta. Cat. 3 R68, Xn R22, Xi R41, Xi R43, N R50

Carc. 2 H351, Muta. 2 H341, Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Sens. 1 H317, Aquatic

Acute 1 H400 M=10

EC. 204-617-8

INDEX. 604-005-00-4

Reg. no. 01-2119524016-51

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.

Skin: avoid the forced separation of bonded leather. Can be removed gently with a pointed object, such as a spoon, preferably after soaking in warm water and soap.

If lips are accidentally stuck together apply warm water on her lips, wetting and pass the saliva presenton the inside of the mouth. Open or curl your lips. Do not try to pull the lips apart with a `direct action opposed.

Eyes: If the eye is bonded closed, release eyelashes with warm water by covering with a damp cloth. Cyanoacrylate will bond

to the eye protein and will cause periods of weeping which will help to debond the adhesive. Keep eye covered until you are not completely backless, usually within 1-3 days. Do not force eye open. Should be utilized to a physician in case of the solid particles of cyanoacrylate are trapped behind the eyelid and should cause abrasion damage.

Ingestion: Ensure that breathing passages are not obstructed. The product polymerizes immediately in the mouth and will

impossible to swallow. Saliva will slowly separate the solidified product from the mouth (several hours).

Inhalation: bring the suffering person to fresh air and keep it in a comfortable position for breathing. If you still feel unwell seek medical attention.

#### 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.

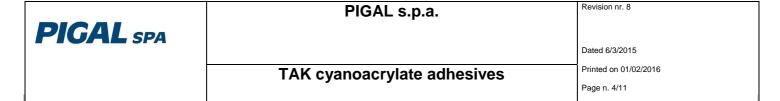
Information not available.

### **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

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.



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For a better shelf-life, store the original containers under refrigeration at 2-8 °C. Store containers between 5 and 35 °C, in a dry and well-ventilated place, away from heat and direct sunlight. Keep away from oxidising agents, strongly acid or alkaline materials.

#### 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** 

Ethy	vI-2-cv	/anoa	crvlate
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Threshold Limit Value. Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
WEL	UK			1,5	0,3
OEL	IRL		0,2		

HYDROQUINONE					
Threshold Limit Value.					
Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
WEL	UK	0,5			
OEL	IRL	0,5			
TLV-ACGIH		1			

### 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.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION



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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 II 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 B 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 transparent Odour characteristic Odour threshold. Not available. Not available. Melting point / freezing point. Not available. Initial boiling point. 105 °C. Boiling range. Not available. Flash point. 82,5 °C. **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. 0,5 mmHg Vapour density Not available. Relative density. 1,1 Kg/l

Solubility insoluble in water
Partition coefficient: n-octanol/water
Auto-ignition temperature.
Decomposition temperature.
Viscosity
Explosive properties
Oxidising properties
Not available.
Not available.
Not available.
Not available.

#### 9.2. Other information.

VOC (Directive 1999/13/EC): 0
VOC (volatile carbon): 0
Can pressure: N.A.

### SECTION 10. Stability and reactivity.



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#### 10.1. Reactivity.

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

Polymerization will occur in the presence of moisture and other basic materials.

#### 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.

#### 10.4. Conditions to avoid.

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

Moisture.

#### 10.5. Incompatible materials.

Keep away from oxidising agents and strongly alkaline or acidic materials in order to avoid exothermic reactions.

#### 10.6. Hazardous decomposition products.

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

In case of fire may generate hazardous decomposition products, such as CO and CO2, fumes and nitrogen oxides.

### **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.

Acute effects: stinging eyes. Symptoms may include: rubescence, edema, pain and lachrymation.

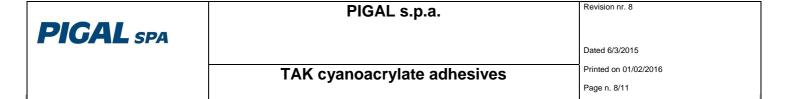
Vapour inhalation may moderately irritate the upper respiratory trait. Contact with skin may cause slight irritation.

Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

Acute effects: contact with skin may cause: irritation, erythema, edema, dryness and chapped skin. Vapour inhalation may slightly irritate the upper respiratory trait. Ingestion may cause health disorders, including stomach pain and sting, nausea and sickness.

Acute effects: vapour inhalation may irritate the lower and upper respiratory tract and cause cough and respiratory disorders. At higher concentrations it can also cause pulmonary edema. Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

Ethyl-2-cyanoacrylate LD50 (Oral). > 5000 mg/kg ratto LD50 (Dermal). > 2000 mg/kg coniglio



### **SECTION 12. Ecological information.**

#### 12.1. Toxicity.

Information not available.

#### 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.**

The code of disposal (determined by how GENERATION of rejection) is not specifiable by the manufacturer in the case of products used in various sectors. Small quantities of cured product can be treated as solid urban waste or industrial waste similar to MSW.

CER code (recommended): 08 04 09.

#### 13.1. Waste treatment methods.

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

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

Avoid littering. Do not contaminate soil, sewers and waterways.

CONTAMINATED PACKAGING

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

### **SECTION 14. Transport information.**

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

### **SECTION 15. Regulatory information.**

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

Seveso category.

None.



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

Product.

Point. 3

Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorisarion (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.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

#### 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:

Carc. 2 Carcinogenicity, category 2

Muta. 2 Germ cell mutagenicity, category 2

Acute Tox. 4 Acute toxicity, category 4

Eye Dam. 1 Serious eye damage, category 1

Eye Irrit. 2 Eye irritation, category 2
Skin Irrit. 2 Skin irritation, category 2

STOT SE 3 Specific target organ toxicity - single exposure, category 3

Skin Sens. 1 Skin sensitization, category 1

Aquatic Acute 1 Hazardous to the aquatic environment, acute toxicity, category 1

H351 Suspected of causing cancer.



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H341 Suspected of causing genetic defects.

H302 Harmful if swallowed.

H318 Causes serious eye damage.
H319 Causes serious eye irritation.

H335 May cause respiratory irritation.H317 May cause an allergic skin reaction.

Causes skin irritation.

H400 Very toxic to aquatic life.

EUH202 Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of

children.

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

R22 HARMFUL IF SWALLOWED.

R36/37/38 IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

Carc. Cat. 3 Carcinogenicity, category 3.

R40 LIMITED EVIDENCE OF A CARCINOGENIC EFFECT.

R41 RISK OF SERIOUS DAMAGE TO EYES.

R43 MAY CAUSE SENSITISATION BY SKIN CONTACT.

R50 VERY TOXIC TO AQUATIC ORGANISMS.

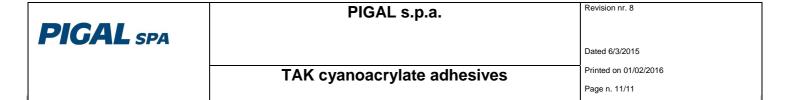
Muta. Cat. 3 Mutagenicity, category 3.

R68 POSSIBLE RISK OF IRREVERSIBLE EFFECTS.

#### LEGEND:

H315

- 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
- WGK: Water hazard classes (German).



#### 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
- 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.