

AFINITICA® AF06

SDB n°: 242926

V4.0 (JULY 2015)

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## SECTION 1: Product and company identification

### 1.1. Product identifier

AFINITICA® AF06

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

Intended use: Adhesive

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

Afinitica Technologies S.L.  
Edificio Eureka, Parc de Recerca UAB  
08193 Bellaterra (Barcelona)

España  
Telephone number: +34 93 580 1974  
[info@afinitica.com](mailto:info@afinitica.com)

### 1.4. Emergency telephone number

Afinitica Technologies S.L. + 34 93 580 19 74

Afinitica Technologies (24 h) + 34 694 412 618

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### 2.1.1. GHS classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 4)  
Skin irritation (Category 2)  
Eye irritation (Category 2A)  
Specific target organ toxicity after single exposure (Category 3)

For the full text of the H-statements mentioned in this Section, see Section 16.

## 2.2. GHS label elements, including precautionary statements

Pictogram



Signal Word

Warning

Hazard statements

H227

Combustible liquid

H315

Causes skin irritation

H319

Causes serious eye irritation

H335

May cause respiratory irritation

Precautionary statements

P210

Keep away from heat – No smoking.

P261

Avoid breathing vapours.

P264

Wash skin thoroughly after handling.

P271

Use only outdoors or in a well-ventilated area.

P280

Wear protective gloves / eye protection.

P302 + P352

IF ON SKIN: Wash with plenty of soap and water.

P304 + P340

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338

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

P312

Call a POISON CENTER or doctor / physician if you feel unwell.

P321

Specific treatment (see supplemental first aid instructions on this label)

P332 + P313

If skin irritation occurs: Get medical attention

P337 + P313

If eye irritation persists: Get medical attention.

P362

Take off contaminated clothing and wash before reuse.

P370 + P378

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

P403 + P233

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

P403 + P235

Store in a well-ventilated place. Keep cool.

P405

Store locked up.

P501

Dispose of container to an approved waste disposal plant.

For full text of these Hazard and Precautionary statements, see Section 16.

## 2.3. Hazards not otherwise classified (HNOC) or not covered by GHS

Lachrymator., Stench.

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

General chemical description: Cyanoacrylate adhesive

#### 3.2.1. Declaration of the ingredients in accordance with 29 CFR 1910 (OSHA HCS):

| Hazardous component   | CAS-No.    | EC-No.    | Content       | Classification   |
|---|------------|-----------|---------------|--|
| Ethyl 2-cyanoacrylate   | 7085-85-0  | 230-391-5 | 80 – 100 %    | Flam. Liq. 4; H227<br>Eye irrit. 2A; H319<br>Skin irrit. 2; H315<br>STOT SE 3; H335  |
| Silicones and siloxanes, dimethyl-, reaction products with silica | 67762-90-7 | -         | 1 – 10 %      | -  |
| Acrylic polymer   | -          | -         | 1 – 10 %      | -  |
| Hydroquinone  | 123-31-9   | 204-617-8 | 0.01 – < 0.1% | Acute Tox. 4; H302<br>Skin Sens. 1; H317<br>Eye Dam. 1; H318<br>Muta. 2; H341<br>Carc. 2; H351<br>Aquatic Acute 1; H400<br>Aquatic Chronic 1; H410<br>M factor: 10 |

For full text of these Hazard and Precautionary statements, see Section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General advice:

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled:

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact:

Do not pull bonded skin apart. It may be gently peeled apart using a blunt object such as a spoon, preferably after soaking in warm soapy water. Cyanoacrylates give off heat on solidification. In rare cases a large drop will generate enough heat to cause a burn. Burns should be treated normally after the adhesive has been removed

from the skin. If lips are accidentally stuck together apply warm water to the lips and encourage maximum wetting and pressure from saliva inside the mouth. Peel or roll lips apart. Do not try to pull the lips apart with direct opposing action.

**In case of eye contact:**

If the eye is bonded closed, release eyelashes with warm water by covering with wet pad. Cyanoacrylate will bond to eye protein and will cause periods of weeping which will help to debond the adhesive. Keep eye covered until debonding is complete, usually within 1-3 days. Do not force eye open. Medical advice should be sought in case solid particles of cyanoacrylate trapped behind the eyelid cause any abrasive damage.

**If swallowed:**

Ensure that breathing passages are not obstructed. The product will polymerise immediately in the mouth making it almost impossible to swallow. Saliva will slowly separate the solidified product from the mouth (several hours).

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

|                    |   |
|--------------------|---|
| Eye                | irritation, conjunctivitis                              |
| Skin               | redness, inflammation                                   |
| Respiratory system | irritation, coughing, breath shortness, chest tightness |

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

See section 4.1

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media:**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Carbon oxides, nitrogen oxides (NO<sub>x</sub>)

**5.3. Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary

**5.4. Further information**

Use water spray to cool unopened containers.

## SECTION 6: Accidental release measures

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

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection, see Section 8.

### 6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains

### 6.3. Methods and materials for containment and cleaning up

Do not use cloths for mopping up. Flood with water to complete polymerization and scrape off the floor. Cured material can be disposed of as non-hazardous waste.

### 6.4. Reference to other sections

See advice in section 8

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Ventilation (low level) is recommended when using large volumes.

Use of dispensing equipment is recommended to minimise the risk of skin or eye contact

Hygiene measures:

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

Good industrial hygiene practices should be observed.

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

For optimum shelf life store in original containers under refrigerated conditions at 2 - 8°C (35.6 - 46.4 °F)

### 7.3. Specific end use(s)

Adhesive

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Occupational Exposure Limits (OEL):

| Substance                           | ACGIH TLV  | OSHA PEL   | AIHA WEEL | OTHER |
|-------------------------------------|--|--|-----------|-------|
| Ethyl 2- cyanoacrylate<br>7085-85-0 | 0.2 ppm TWA                                      | -  | -         | -     |
| Silica dust                         | 10 mg/m <sup>3</sup> TWA<br>(inhalable dust)     | 15 mg/m <sup>3</sup> TWA<br>(total dust)         | -         | -     |
|                                     | 3 mg/m <sup>3</sup> TWA<br>(respirable fraction) | 5 mg/m <sup>3</sup> TWA<br>(respirable fraction) |           |       |
| Acrylic polymer                     | -  | 4 mg/m <sup>3</sup><br>(respirable dust)         | -         | -     |
|                                     |  | 10 mg/m <sup>3</sup><br>(inhalable dust)         |           |       |
| Hydroquinone<br>123-31-9            | 1 mg/m <sup>3</sup> TWA                          | 2 mg/m <sup>3</sup> TWA                          |           |       |

#### Biological occupational exposure limits:

| Substance                | Value on basis:<br>ACGIH BEI | Parameters    | Biological<br>specimen | Remarks                   |
|--------------------------|------------------------------|---------------|------------------------|---------------------------|
| Hydroquinone<br>123-31-9 | 1.5 %                        | Methemoglobin | In blood               | During or end of<br>shift |

## 8.2. Exposure controls

#### Appropriate engineering controls:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment:

##### Eye/face protection:

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166 (EU).

##### Skin protection:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

##### Body protection:

Use impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### Respiratory protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

##### Control of environmental exposure:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## SECTION 9: Physical and chemical properties

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

|   |                                  |
|---|----------------------------------|
| Appearance                              | Liquid<br>Colourless             |
| Odour                                   | Irritating                       |
| pH                                      | No data available/Not applicable |
| Initial boiling point                   | 80 °C (176 °F)                   |
| Flash point                             | No data available/Not applicable |
| Decomposition temperature               | No data available/Not applicable |
| Vapour pressure                         | No data available/Not applicable |
| Density                                 | No data available/Not applicable |
| Bulk density                            | No data available/Not applicable |
| Viscosity                               | No data available/Not applicable |
| Viscosity (kinematic)                   | No data available/Not applicable |
| Explosive properties                    | No data available/Not applicable |
| Qualitative solubility (solvent: water) | Polymerises in presence of water |
| Solidification temperature              | No data available/Not applicable |
| Melting point                           | No data available/Not applicable |
| Flammability                            | No data available/Not applicable |
| Auto-Ignition temperature               | No data available/Not applicable |
| Explosive limits                        | No data available/Not applicable |
| Partition coefficient n-octanol/water   | No data available/Not applicable |
| Evaporation rate                        | No data available/Not applicable |
| Vapour density                          | No data available/Not applicable |
| Oxidizing properties                    | No data available/Not applicable |

### 9.2. Other safety information

No data available/Not applicable

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available/Not applicable.

### 10.2. Chemical stability

Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

No data available/Not applicable.

### 10.4. Conditions to avoid

Heat, flames and sparks.

## 10.5. Incompatible materials

Reducing agents, water, amines, alcohols, alkali metals, oxidizing agents.

## 10.6. Hazardous decomposition products

Other decomposition products – no data available.  
In the event of fire: see Section 5.

# SECTION 11: Toxicological information

## 11.1. Information on toxicological effects

### Aspiration hazard:

Irritating to respiratory system

### Acute oral toxicity:

| Hazardous components CAS-No.       | Value type | Value         | Route of application | Exposure time | Species | Method                                   |
|------------------------------------|------------|---------------|----------------------|---------------|---------|--|
| Ethyl 2-cyanoacrylate<br>7085-85-0 | LD50       | > 5.000 mg/kg | oral                 | -             | rat     | OECD Guideline 401 (Acute Oral Toxicity) |

### Acute dermal toxicity:

| Hazardous components CAS-No.       | Value type | Value         | Route of application | Exposure time | Species | Method                                     |
|------------------------------------|------------|---------------|----------------------|---------------|---------|--|
| Ethyl 2-cyanoacrylate<br>7085-85-0 | LD50       | > 2.000 mg/kg | dermal               | -             | rabbit  | OECD Guideline 402 (Acute Dermal Toxicity) |

### Skin corrotion/irritation:

| Hazardous components CAS-No.       | Result               | Exposure time | Species | Method   |
|------------------------------------|----------------------|---------------|---------|--|
| Ethyl 2-cyanoacrylate<br>7085-85-0 | Mild skin irritation | 24 h          | rabbit  | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |

### Serious eye damage/irritation:

| Hazardous components CAS-No.       | Result     | Exposure time | Species | Method  |
|------------------------------------|------------|---------------|---------|---|
| Ethyl 2-cyanoacrylate<br>7085-85-0 | irritating | 72 h          | rabbit  | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |



**Respiratory or skin sensitization:**

| Hazardous components<br>CAS-No.    | Result          | Exposure time                      | Species    | Method |
|------------------------------------|-----------------|------------------------------------|------------|--------|
| Ethyl 2-cyanoacrylate<br>7085-85-0 | Non sensitizing | -                                  | Guinea pig | -      |
| Hydroquinone<br>123-31-9           | Sensitising     | Guinea pig<br>maximisation<br>test | Guinea pig | -      |

**Germ cell mutagenicity:**

| Hazardous components<br>CAS-No.    | Result   | Type of study<br>/ Route of<br>administration           | Metabolic<br>activation /<br>Exposure<br>time | Species | Method  |
|------------------------------------|----------|---|---|---------|---|
| Ethyl 2-cyanoacrylate<br>7085-85-0 | negative | mammalian cell<br>gene mutation<br>assay                | with and<br>without                           | -       | OECD Guideline 476 (In<br>vitro Mammalian Cell<br>Gene Mutation Test)       |
| Ethyl 2-cyanoacrylate<br>7085-85-0 | negative | bacterial reverse<br>mutation assay<br>(e.g Ames test)  | -   | -       | OECD Guideline 471<br>(Bacterial Reverse<br>Mutation Assay)                 |
| Ethyl 2-cyanoacrylate<br>7085-85-0 | negative | in vitro<br>mammalian<br>chromosome<br>aberration test  | with and<br>without                           | -       | OECD Guideline 473 (In<br>vitro Mammalian<br>Chromosome Aberration<br>Test) |
| Hydroquinone<br>123-31-9           | negative | Bacterial reverse<br>mutation assay<br>(e.g. Ames test) | with and<br>without                           | -       | EU Method B.13/14<br>(Mutagenicity)   |

**Repeated dose toxicity:**

| Hazardous components<br>CAS-No. | Result               | Route of<br>application | Exposure<br>time /<br>Frequency of<br>treatment | Species | Method   |
|---------------------------------|----------------------|-------------------------|---|---------|--|
| Hydroquinone<br>123-31-9        | NOAEL ≥<br>250 mg/kg | oral: gavage            | 14 days, 5<br>days/week. 12<br>doses            | rat     | OECD Guideline 407<br>(repeated Dose 28-Day<br>Oral Toxicity in Rodents) |
| Hydroquinone<br>123-31-9        | LOAEL ≤<br>500 mg/kg | oral: gavage            | 14 days, 5<br>days/week. 12<br>doses            | rat     | OECD Guideline 407<br>(repeated Dose 28-Day<br>Oral Toxicity in Rodents) |

**Carcinogenicity:**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA.

## SECTION 12: Ecological information

### 12.1. Toxicity

| Hazardous components CAS-No. | Value type | Value       | Acute Toxicity Study | Exposure time | Species  | Method   |
|------------------------------|------------|-------------|----------------------|---------------|--|--|
| Hydroquinone 123-31-9        | LC50       | 0.638 mg/l  | Fish                 | 96 h          | Oncorhynchus mykiss  | OECD Guideline 203 (Fish, Acute Toxicity Test)             |
| Hydroquinone 123-31-9        | EC50       | 0.134 mg/l  | Daphnia              | 48 h          | Daphnia magna  | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Hydroquinone 123-31-9        | EC50       | 0.335 mg/l  | Algae                | 72 h          | Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata) | OECD Guideline 201 (Alga, Growth Inhibition Test)          |
| Hydroquinone 123-31-9        | NOEC       | 0.0057 mg/l | chronic Daphnia      | 21 d          | Daphnia magna  | OECD 211 (Daphnia magna, Reproduction Test)                |

### 12.2. Persistence and degradability

| Hazardous components CAS-No.    | Result                | Route of application | Degradability | Method  |
|---------------------------------|-----------------------|----------------------|---------------|---|
| Ethyl 2-cyanoacrylate 7085-85-0 | -                     | aerobic              | 57 %          | OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)                   |
| Hydroquinone 123-31-9           | readily biodegradable | Aerobic              | 75 – 81 %     | EU Method C.4-E (Determination of the "Ready" Biodegradability: Closed Bottle Test) |

### 12.3. Bioaccumulative potential

No data available.

### 12.4. Mobility in soil

No data available.

## 12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

## 12.6. Other adverse effects

No data available.

# SECTION 13: Disposal considerations

## 13.1. Waste treatment methods

### Product disposal:

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

### Disposal of uncleaned packages:

Dispose of as unused product.

# SECTION 14: Transport information

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

## U.S. Department of Transportation Ground (49 CFR)

|                          |  |
|--------------------------|--|
| Proper shipping name     | Combustible liquid, n.o.s. (Cyanoacrylate ester) |
| Hazard class or division | Combustible liquid                               |
| Identification number    | NA 1993  |
| Packing group            | III  |

## International Air Transportation (ICAO/IATA)

|                          |  |
|--------------------------|--|
| Proper shipping name     | Aviation regulated liquid, n.o.s. (Cyanoacrylate ester)  |
| Hazard class or division | 9  |
| Identification number    | UN 3334  |
| Packing group            | III  |
| Exceptions               | Primary packs containing less than 500 ml are unregulated by this mode of transport and may be shipped unrestricted. |

## Water transportation (IMO/IMDG)

|                          |                |
|--------------------------|----------------|
| Proper shipping name     | Not regulated. |
| Hazard class or division | None.          |
| Identification number    | None.          |
| Packing group            | None.          |

## SECTION 15: Regulatory information

### United States Regulatory Information

|  |   |
|--|---|
| <b>TSCA 8 (b) Inventory Status</b>     | All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.   |
| <b>TSCA 12 (b) Export Notification</b> | None above reporting De Minimis.  |
| <b>SARA 302 Components</b>             | No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.   |
| <b>SARA 313 Components</b>             | This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. |
| <b>SARA 311/312 Hazards</b>            | Fire Hazard, Acute Health Hazard, Chronic Health Hazard.  |
| <b>California Proposition 65</b>       | This product contains a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.  |

## SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

|                 |   |
|-----------------|---|
| Flam. Liq.      | Flammable liquids.                                    |
| Eye irrit.      | Eye irritation.                                       |
| Skin irrit.     | Skin irritation.                                      |
| STOT SE         | Specific target organ toxicity – single exposure.     |
| Acute Tox.      | Acute toxicity  |
| Skin Sens.      | Skin sensitisation.                                   |
| Eye Dam.        | Serious eye damage.                                   |
| Muta.           | Germ cell mutagenicity.                               |
| Carc.           | Carcinogenicity.                                      |
| Aquatic Acute   | Aquatic acute toxicity.                               |
| Aquatic Chronic | Chronic aquatic toxicity.                             |
| H227            | Combustible liquid.                                   |
| H302            | Harmful if swallowed.                                 |
| H315            | Causes skin irritation.                               |
| H317            | May cause an allergic skin reaction.                  |
| H318            | Causes serious eye damage.                            |
| H319            | Causes serious eye irritation.                        |
| H335            | May cause respiratory irritation.                     |
| H341            | Suspected of causing genetic defects.                 |
| H351            | Suspected of causing cancer.                          |
| H400            | Very toxic to aquatic life.                           |
| H410            | Very toxic to aquatic life with long lasting effects. |
| H411            | Toxic to aquatic life with long lasting effects.      |

|                    |   |
|--------------------|---|
| P210               | Keep away from heat – No smoking.   |
| P261               | Avoid breathing vapours.  |
| P264               | Wash skin thoroughly after handling.  |
| P271               | Use only outdoors or in a well-ventilated area.   |
| P280               | Wear protective gloves / eye protection.  |
| P302 + P352        | IF ON SKIN: Wash with plenty of soap and water.   |
| P304 + P340        | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.                                |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. |
| P312               | Call a POISON CENTER or doctor / physician if you feel unwell.  |
| P321               | Specific treatment (see supplemental first aid instructions on this label)  |
| P332 + P313        | If skin irritation occurs: Get medical attention  |
| P337 + P313        | If eye irritation persists: Get medical attention.  |
| P362               | Take off contaminated clothing and wash before reuse.   |
| P370 + P378        | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.   |
| P403 + P233        | Store in a well-ventilated place. Keep container tightly closed.  |
| P403 + P235        | Store in a well-ventilated place. Keep cool.  |
| P405               | Store locked up.  |
| P501               | Dispose of container to an approved waste disposal plant.   |

## Further information

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

This safety data sheet was prepared in accordance with 29 CFR 1910 (OSHA HCS).