

AFINITICA® ADHESIVE WELDING METAL+ Part B

SDB nº: 242984

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

### 1.1. Product identifier

AFINITICA® ADHESIVE WELDING METAL+ Part B

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

Intended use: Activator

### 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  
Teléfono: +34 93 143 1952  
[info@afinitica.com](mailto:info@afinitica.com)

### 1.4. Emergency telephone number

Afinitica Technologies S.L. + 34 93 143 1952

Afinitica Technologies (24 h) + 34 694 412 618

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Classification according to Regulation CLP (EC) No. 1272/2008

Eye irritation (Category 2)  
Skin irritation (Category 2)  
Skin sensitization (Category 1)

## 2.2. Label elements

Labelling according to Regulation CLP (EC) No. 1272/2008

Pictogram



Signal Word

Warning

Hazard statements:

H315 : Causes skin irritation.

H317 : May cause an allergic skin reaction.

H319 : Causes serious eye irritation.

Precautionary statements:

**Prevention:**

P261 : Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P280 : Wear protective gloves/protective clothing/eye protection/face protection.

**Response:**

P333 + P313 : If skin irritation or rash occurs: Get medical advice/ attention.

P337 + P313 : If eye irritation persists: Get medical advice/ attention.

P362 + P364 : Take off contaminated clothing and wash it before reuse.

**Disposal:**

None

**Contains:**

2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate

## 2.3. Other hazards

vPvB substances: None - PBT substances: None

# SECTION 3: Composition/Information on ingredients

## 3.1. Substances

Not applicable

## 3.2. Mixtures

Declaration of the ingredients according to Regulation CLP (EC) No. 1272/2008:

Hazardous component	CAS-No.	EC-No.	Content	Classification
Trimethylolpropane triacrylate	15625-89- 5	239-701-3	>= 90%	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317
Silicones and siloxanes, dimethyl-, reaction products with silica	67762-90-7	-	>=3%- <5%	This product is not dangerous according to Regulation CLP (EC) No. 1272/2008

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General advice:

Show this safety data sheet to the doctor in attendance.

#### Inhalation:

Move to fresh air. Oxygen or artificial respiration if needed. If symptoms persist, call a physician

#### Skin contact:

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. In the case of skin irritation or allergic reactions see a physician.

#### Eye contact:

Wash open eyes immediately, abundantly and thoroughly for at least 15 minutes. Seek advice of an ophthalmologist if necessary.

#### Ingestion:

Do NOT induce vomiting. Rinse mouth. Consult a physician if necessary.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

### 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 alcohol-resistant foam, dry chemical or carbon dioxide

#### Unsuitable extinguishing media

High volume water jet

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

Formation of toxic products through combustion; Carbon oxides

## 5.3. Advice for firefighters

No data available / Not applicable

## 5.4. Further information

No data available / Not applicable

# SECTION 6: Accidental release measures

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

Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas. Remove all sources of ignition. Prohibit contact with skin and eyes. Avoid inhalation of vapour or mist.

## 6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not release into the environment.

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

### Recovery:

Shovel into suitable container for disposal. Absorb the remainder with an inert absorbent material (sand, vermiculite, perlite). Use clean non-sparking tools to collect absorbed material.

## 6.4. Reference to other sections

See advice in section 8

# SECTION 7: HANDLING AND STORAGE

## 7.1. Precautions for safe handling

### Technical measures/Precautions:

Storage and handling precautions applicable to products: Liquid. Irritant. Sensitizing. Provide appropriate exhaust ventilation at machinery. Provide showers, eye-baths

### Safe handling advice:

Remove all sources of ignition. Avoid static electricity build up with connection to earth. In case of insufficient ventilation, wear suitable respiratory equipment.

### Hygiene measures:

Take off immediately all contaminated clothing. Prohibit contact with skin and eyes. Wash hands before breaks and at the end of workday. When using do not eat, drink or smoke. Wash hands

after handling. Remove contaminated clothing and protective equipment before entering eating areas.

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

Keep tightly closed in a dry, cool and well-ventilated place. Store in original container. Protect from frost, heat and sunlight. Keep away from open flames, hot surfaces and sources of ignition. Make sure of the presence of air and inhibitor in the drums. In addition, the product's inhibitor(s) require the presence of dissolved oxygen. An air space is required above the liquid in all containers; avoid storage under an oxygen-free atmosphere.  
Storage period: 6 Months, Storage temperature: < 45 °C

### Incompatible products:

Acids Bases Oxidizing agents Reducing agents

### Packaging material:

**Recommended:** Baked phenolic lined carbon steel drums, Plastic drum **To be avoided:** copper, Iron

## 7.3. Specific end uses

Activator

# SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

Valid for  
Great Britain

### Occupational Exposure Limits (OEL):

Substance	Long-term exposure limit (8-hr TWA reference period)		Short-term exposure limit (15 minute reference period)		Remarks
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Silica dust	-	4 (respirable dust)	-	-	-
		10 (inhalable dust)			

### Derived No Effect Level (DNEL) for Trimethylolpropane triacrylate (CAS: 15625-89-5)

End Use	Inhalation	Ingestion	Skin contact
Workers	3,5 mg/m <sup>3</sup> (LT,SE)		84 mg/kg (LT,SE)
Consumers	0,87 mg/m <sup>3</sup> (LT,SE)		42 mg/kg (LT,SE)

Compartment:	Value:
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Soil	0,005 mg/kg dw
Fresh water sediment	0,015 mg/kg dw
Marine sediment	0,003 mg/kg dw
Fresh water	0,001 mg/l
Marine water	0,0001 mg/l
Effects on waste water treatment plants	6,25 mg/l
Oral (Secondary Poisoning)	10 mg/kg food
Water (Intermittent release)	0,015 mg/l

## 8.2. Exposure controls

### Appropriate engineering controls:

When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

### Personal protective equipment:

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

#### Hand protection:

Gloves nitrile rubber Products used with solvents Do not use., Natural Rubber, Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

#### Eye/face protection:

Safety glasses with side-shields, Do not wear contact lenses.

#### Skin and body protection:

Long sleeved clothing

**Environmental exposure controls:** See chapter 6

## SECTION 9: Physical and chemical properties

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

Appearance	Gel
	Colourless
Odour	Characteristic
pH	No data available/Not applicable
Initial boiling point	No data available/Not applicable
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	No data available/Not applicable
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

Stable under recommended storage conditions

### 10.2. Chemical stability

See section 10.1

### 10.3. Possibility of hazardous reactions

Inhibitors have been added to stabilize this product. Maintaining air in the storage containers is important to keep inhibitors active. Unless inhibited, hazardous polymerisation may occur. Polymerization is exothermic and can degenerate into an uncontrolled reaction.

### 10.4. Conditions to avoid

Heat, flames and sparks. Remove all sources of ignition. Take precautionary measures against static discharges.

### 10.5. Incompatible materials

Acids, Bases, Oxidizing agents, Reducing agents

### 10.6. Hazardous decomposition products

Formation of toxic products through combustion; Carbon oxides

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### General toxicological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC.

Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

### **Acute toxicity:**

#### **Inhalation**

Slightly or not harmful by inhalation

• In animals :

Trimethylolpropane triacrylate CAS 15625-89-5:

No mortality/6 h/Rat: 0,55 mg/l (vapour saturated atmosphere)

#### **Ingestion**

May be harmful if swallowed.

• In animals :

Trimethylolpropane triacrylate CAS 15625-89-5:

LD50/Rat: 3.680 - 5.000 mg/kg

#### **Dermal**

Slightly harmful in contact with skin

• In animals :

Trimethylolpropane triacrylate CAS 15625-89-5:

LD50/Rat: > 2.000 mg/kg; LD50/Rabbit: 5.170 mg/kg

### **Local effects ( Corrosion / Irritation / Serious eye damage ):**

#### **Skin contact:**

Irritating to skin.

• In animals :

Trimethylolpropane triacrylate CAS 15625-89-5:

Skin irritation (OECD Test Guideline 404, Rabbit)

#### **Eye contact:**

Irritating to eyes.

• In animals :

Trimethylolpropane triacrylate CAS 15625-89-5:

Eye irritation (Rabbit)

### **Respiratory or skin sensitisation:**

#### **Inhalation:**

No data available.

#### **Skin contact:**

May cause an allergic skin reaction (Trimethylolpropane triacrylate CAS 15625-89-5):

• In man :

Some cases of cutaneous sensitization reported

• In animals :

Strong sensitizing effects by skin contact. (Method: Guinea pig maximization test, Guinea pig)

No skin allergy was observed (Method: Buehler Test, Guinea pig)

No skin allergy was observed (Method: LLNA: Local Lymph Node Assay, Mouse)



**CMR effects :****Mutagenicity:**

Based on the available information, it is not possible to conclude on the hazard potential of this product.

**In vitro**

Trimethylolpropane triacrylate CAS 15625-89-5:

Ames test in vitro: Inactive (Method: OECD Test Guideline 471)

In vitro gene mutations test on mammalian cells: Inactive

Tests for chromosome aberrations in vitro on mammalian cells: Active (Method: OECD Test Guideline 473)

**In vivo**

Trimethylolpropane triacrylate CAS 15625-89-5:

Micronucleus test in vivo mouse: Inactive (Method: OECD Test Guideline 474)

**Carcinogenicity:**

According to available experimental data: Animal experiments showed a statistically significant number of tumours.

**• In animals :**

Trimethylolpropane triacrylate CAS 15625-89-5:

(2 years, Dermal)

Presence of: Tumors, Target organs: Liver, uterus (Mouse), mesothelioma, Target organs: peritoneum (Rat)

**Reproductive toxicity:****Fertility:**

Based on the available data, the substance is not suspected of having reprotoxic potential.

**• In animals :**

Trimethylolpropane triacrylate CAS 15625-89-5:

Reproduction Test: Absence of toxic effects on fertility

NOAEL ( Parental toxicity ): 300 mg/kg bw/day

NOAEL ( Fertility ): 300 mg/kg bw/day

(Method: OECD Test Guideline 422, Rat, By oral route)

**Foetal development:**

Based on the available data, the substance is not suspected of having developmental toxicity potential.

**• In animals :**

Trimethylolpropane triacrylate CAS 15625-89-5:

Toxic effects for foetal development at toxic maternal doses

NOAEL ( Developmental Toxicity ): < 500 mg/kg bw/day

NOAEL ( Maternal Toxicity ): < 500 mg/kg bw/day

(Method: OECD Test Guideline 414, Rat, By oral route)

Absence of toxic effects for foetal developmen

NOAEL ( Maternal Toxicity ): > 130 mg/kg bw/day

NOAEL ( Developmental Toxicity ): > 130 mg/kg bw/day

(Method: OECD Test Guideline 414, Rabbit, By oral route)

**Specific target organ toxicity :****Single exposure :**

Inhalation

Risk of irritation of respiratory system

**Repeated exposure:**

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

• In animals :

Trimethylolpropane triacrylate CAS 15625-89-5:

By oral route: No specific toxic effects

NOAEL= 300 mg/kg (Method: OECD Test Guideline 422, Rat, 4 Weeks) Local irritation of the stomach

NOAEL= 30 mg/kg

dermal route: No specific toxic effects

NOAEL= 200 mg/kg (rat and mouse, 2 Weeks)

Local irritation

NOAEL= 25 mg/kg

**Aspiration hazard:**

Not applicable

## SECTION 12: Ecological information

All available and relevant data on this product and/or the components quoted in section 3 and/or the analogue substances/metabolites have been taken into account for the hazard assessment.

Acute aquatic toxicity : Toxic to aquatic life. Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

### 12.1. Acute Toxicity

Trimethylolpropane triacrylate CAS 15625-89-5:

- Fish: **Toxic to fish**. LC50, 96 h (Leuciscus idus (Golden orfe)) : 1,47 mg/l (Method: Standard : DIN 38412-15)
- Aquatic invertebrates: **Harmful to daphnia**. EC50, 48 h (Daphnia magna (Water flea)) : 19,9 mg/l (Method: OECD Test Guideline 202)
- Aquatic plants: **Toxic to algae**. ErC50, 96 h (Desmodesmus subspicatus (Scenedesmus subspicatus)) : 4,86 mg/l (Method: OECD Test Guideline 201)
- Microorganisms: EC20, 30 min (Activated sludge) : 625 mg/l (Method: ISO 8192)

Aquatic toxicity / Long term toxicity:

- Aquatic plants: ErC10, 96 h (Desmodesmus subspicatus (green algae)) : 0,57 mg/l (Method: OECD Test Guideline 201)

### 12.2. Persistence and degradability

Trimethylolpropane triacrylate CAS 15625-89-5:

- Stability in water:

Half-life: > 1 y at 50 °C and pH 4

Half-life: 352 d at 20 °C and pH 7

Half-life: 4,54 d at 20 °C and pH 9

Method: OECD Test Guideline 111

- Biodegradation (In water)

#### **Readily biodegradable**

Readily biodegradable: 86 % after 28 d (Method: OECD Test Guideline 301 B)

### **12.3. Bioaccumulative potential**

Trimethylolpropane triacrylate CAS 15625-89-5:

- Bioaccumulation:

#### **Slightly bioaccumulable.**

Partition coefficient: n-octanol/water: log Kow : 0,67 , at 23 °C, Slightly bioaccumulable. (Method: OECD Test Guideline 107)

### **12.4. Mobility in soil**

Trimethylolpropane triacrylate CAS 15625-89-5:

- Vapor pressure

0,1 Pa, 20 °C, (Method: OECD Test Guideline 104)

- Surface tension

51 mN/m 20 °C (Method: OECD Test Guideline 115)

- Absorption/desorption

log Koc: 2,2 ( Method: OECD Test Guideline 121 )

### **12.5. Results of PBT and vPvB assessment**

According to REACH regulation, annex XIII, this product contains substance that do not meet PBT and vPvB criteria.

### **12.6. Other adverse effects**

No data available/Not applicable

## **SECTION 13: Disposal considerations**

### **13.1. Waste treatment methods**

Product disposal:

Dispose of in accordance with local and national regulations.  
Contribution of this product to waste is very insignificant in comparison to article in which it is used

**Disposal of uncleaned packages:**

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.  
Disposal must be made according to official regulations.

**Waste code:**

08 04 09 waste adhesives and sealants containing organic solvents and other dangerous substances.  
The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

## SECTION 14: Transport information

### 14.1 UN number

ADR/RID: Not dangerous goods  
ADNR: Not dangerous goods  
IMDG: Not dangerous goods  
IATA: Not dangerous goods

### 14.2. UN proper shipping name

ADR/RID: Not dangerous goods  
ADNR: Not dangerous goods  
IMDG: Not dangerous goods  
IATA: Not dangerous goods

### 14.3. Transport hazards class(es)

ADR/RID: Not dangerous goods  
ADNR: Not dangerous goods  
IMDG: Not dangerous goods  
IATA: Not dangerous goods

### 14.4. Packaging group

ADR/RID: Not dangerous goods  
ADNR: Not dangerous goods  
IMDG: Not dangerous goods  
IATA: Not dangerous goods

### 14.5. Environmental hazards

ADR/RID: no  
ADNR: no  
IMDG Marine pollutant: no  
IATA: no

## 14.6. Special precautions for user

No data available/Not applicable

## 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available/Not applicable

# SECTION 15: Regulatory information

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

Additional regulations (European Union ) :

Hazardous Waste Regulations 2005: Applies

The Control of substances Hazardous to Health Regulations 2002 (as ammended): Banned and/or restricted

UK REGULATION: Chip3: Chemical (Hazard Information and Packaging for Supply) Regulations 2002

## 15.2. Chemical Safety Assessment

No data available/Not applicable

# SECTION 16: Other information

The labelling of the product is indicated in Sections 2 and 3. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

## 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 Regulation (EC) No. 1272/2008