

# Firmafix

## Material Safety Data Sheet

<b>1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY</b>	<b>BASE component 1 of 2</b>			
PRODUCT NAME AND CODE: FirmaFix The Blast Shop				
<b>2. COMPOSITION/INFORMATION ON INGREDIENTS</b>				
NATURE & COMPOSITION: Liquid DGEBA/F epoxy resin containing mono functional higher isomer diluent. Mixture consisting of the following components				
CAS No	Designation	%	Index	R-Phases
55492-52-9	BPF-epoxy resin; MW < 700	50-100	Xi	36/38-43
25068-38-6	BPA-epoxy resin; MW < 700	10-24,9	Xi	36/38-43
68081-84-5	C13/C15 - Alkylglycidylether	10-24,9	Xi	36/38-43
<b>3. HAZARDS IDENTIFICATION</b>				
Hazard designation: Xi irritant N dangerous for the environment				
<b>4. FIRST-AID MEASURES</b>				
INHALATION: Remove victim to ventilated area - seek medical attention SKIN: Wash with warm soapy water immediately, remove contaminated clothing, do not use solvents to remove from skin. EYES: Rinse with copious amounts of water, seek medical attention. INGESTION: Seek medical attention.				
<b>5. FIRE-FIGHTING MEASURES</b>				
AUTOIGNITION TEMPERATURE: >100°C SPECIAL HAZARDS: Formation of toxic gases is possible. EXTINGUISHANTS LARGE FIRE/SMALL FIRE: Dry powder CO <sub>2</sub> , water jet, foam.				
<b>6. ACCIDENTAL RELEASE MEASURES</b> Methods for cleaning up: Absorb in earth or sand and place into containers for disposal. Disposal of containers according to local regulations. Wash spill site thoroughly after material pick-up is complete. Prevent liquid from entering sewers.				
<b>7. HANDLING AND STORAGE</b>				
STORAGE PRECAUTIONS: Store in original containers between +5°C and +35°C. Keep container tightly sealed. HANDLING: Ensure good ventilation at work place.				
<b>8. EXPOSURE CONTROLS/PERSONAL PROTECTION</b>				
RECOMMENDED PROTECTIVE CLOTHING: Goggles/glasses, rubber gloves, overalls, barrier cream. GENERAL PROTECTION AND HYGIENIC MEASURES: Keep away from foodstuffs, beverages and food. Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of work. Avoid contact with eyes and skin.				
<b>9. PHYSICAL AND CHEMICAL PROPERTIES</b>				
PHYSICAL STATE: Grey paste		APPEARANCE: Grey		
DENSITY @ 25°C: 1.9		ODOUR: Slight sweet		
VAPOUR DENSITY (AIR = 1):		pH: 7.0		
VAPOUR PRESSURE @ 25°C: < 1.0		VISCOSITY @ 25°C: Non newtonian		
SOLUBLE IN WATER: Insoluble				
<b>10. STABILITY AND REACTIVITY</b>				
THERMAL DECOMPOSITION/CONDITIONS TO BE AVOIDED: to avoid thermal decomposition do not overheat. DANGEROUS REACTIONS: reacts with amines, reacts with catalysts DANGEROUS PRODUCTS OF DECOMPOSITION: no dangerous decomposition products known.				
<b>11. TOXICOLOGICAL INFORMATION</b>				
ACUTE TOXICITY:				
PRIMARY IRRITANT EFFECT:				
ON THE SKIN: irritant for skin and mucous membranes				
ON THE EYE: irritant effect				
SENSITIZATION: sensitization possible by skin contact				
<b>12. ECOLOGICAL INFORMATION:</b>				
GENERAL NOTES: Should not be allowed to enter sewers and water courses. Water hazard class 2.				
<b>13. DISPOSAL CONSIDERATIONS</b>				
Do not allow into drains or water courses. Wastes including emptied containers, are controlled wastes and should be disposed of in accordance with Local and National regulations made under the Control of Pollution Act and the Environmental Protection Act. Using information provided in this data sheet, advice should be obtained from the Waste Regulation Authority whether the special waste regulations apply.				
<b>14. TRANSPORT INFORMATION</b>				
Land transport ADR/RID and GGVS-GGVE (cross-border - domestic)		UN-number:	3082	
ADR/RID - GGVS-E Class: 9 various dangerous materials and objects		label:	9	
Number-letter: 11c				
Kemler number: 90				
designation of goods: environment hazardous substance, liquid, N.O.S. (epoxy resin)				
<b>15. REGULATORY INFORMATION</b>				
Designation according to EC guidelines: This product has been classified and labelled in accordance with EC directives See paragraphs 2, 3, and 8				
<b>16. OTHER INFORMATION</b>				
Customers are urged to ensure that the product is entirely suitable for their own purpose. It is the customer's responsibility to ensure that a suitable and sufficient assessment of the risks created by a work activity using this product is undertaken before this product is used. This information contained herein is based on our present knowledge however, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.				

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TWO COMPONENT STYRENE FREE CHEMICAL ANCHOR

## MATERIAL SAFETY DATA SHEET.

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### 1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY.

- \* Business name:
- \* Type of product: **Two component Chemical Anchor without styrene.**
- \* Supplier: **The Blast Shop**

### 2. COMPOSITION.

- \* DCPD resin solved in HEMA and vinyltoluene.
- \* Dibenzoile peroxide. Peroxide content <5%.

### 3. IDENTIFICATION OF DANGERS.

- \* POLYESTER:
  - \* Flamate volatile liquid.
  - \* Noxious for live organisms.
  - \* Harmful when inhaled, irritation of skin, eyes and respiratory tracts.
- \* PEROXIDE:
  - \* May cause fires.
  - \* Harmful when ingested.
  - \* Causes burning.

### 4. FIRST AID.

- \* In the case of contact with the eyes, wash immediately with abundant water and consult a doctor.
- \* In the case of contact with the skin, wash immediately with soap and water.
- \* In the case of inhalation, take the person affected to a well-ventilated area.
- \* In case of ingestion, wash the mouth with water. Do not provoke vomiting and consult a doctor.

### 5. FIRE-FIGHTING MEASURES.

- \* Fire extinction: foam, dry chemical dust, CO<sub>2</sub> or sprays water.

### 6. MEASURES TO BE TAKEN IN CASE OF SPILLING ACCIDENT.

- \* Avoid spilling in sewers or natural channels.
- \* Avoid sources of heat.
- \* To clean, use sand or other inert material as absorber. Clean the remainder with water.

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### 7. HANDLING AND STORAGE.

- \* Do not smoke, eat or drink during the application.
- \* Keep away from sources of ignition.
- \* Keep in a fresh dark place, and avoid exposure to the sun.

### 8. CONTROL OF EXPOSURE. INDIVIDUAL PROTECTION.

- \* Provide suitable ventilation.
- \* Use waterlight gloves.
- \* Use safety glasses.
- \* Maximum styrene exposure. (STEL): 425 mgr. /m<sup>3</sup>.

### 9. PHYSICAL AND CHEMICAL PROPERTIES.

	POLYESTER	PEROXIDE
PHYSICAL STATE	Liquid	Paste
FUSION POINT	---	- 10 °C.
DENSITY	1.12 gr./cm <sup>3</sup> .	1.07 gr./cm <sup>3</sup> .
25 °C. VISCOSITY	600 cps.	Thixotrophy
SELF-IGNITION TEMPERATURE	490 °C.	375 °C.
ACTIVE OXYGEN CONTENT	---	6.5 - 6.7 %
SADT	---	45 °C.

### 10. STABILITY AND REACTIVITY.

- \* RESIN:
  - \* Stable in normal conditions.
  - \* Avoid contact with comburent materials.
  - \* Danger of decomposition: none.
- \* PEROXIDE:
  - \* At temperature over 45 °C., an autoaccelerated decomposition reaction may occur.
  - \* Violent reactions with acids, alkalis, heavy metals and reducing agents can be expected.

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### 11. TOXICOLOGICAL INFORMATION.

- \* RESIN:
  - \* Acute oral toxicity to vinyltoluene (DL50): 2255 mg./kg (rat)
  - \* Acute oral toxicity to HEMA (DL50): >3000 mg./kg (rabbit)
  
- \* PEROXIDE:
  - \* In the case of technically pure substances, "1 - Hydroxy-1' - hydroperoxydicyclohexil peroxide", the following data exists:
    - \* Acute toxicity:
      - Oral LD50      Mouse: 880 mg./Kg.
  
    - \* Irritation:
      - Skin:            Corrosive
      - Eyes:           Highly irritant.

### 12. ECOLOGICAL INFORMATION.

- \* RESIN:
  - \* Use the prepared substance in accordance with the correct norms of usage, avoiding its dispersion in the environment.
  
- \* PEROXIDE:
  - \* There is no experimental data available.

### 13. INFORMATION ABOUT ELIMINATION.

- \* Controlled incineration is a good method for its elimination. Operate in accordance with the legal requirements, local or national.

### 14. INFORMATION ABOUT TRANSPORT.

- \* RESIN:
  - \* Transport in accordance with TPC/ADR.
  - \* Marginal 2,301, class 3, section 31, letter C.
  - \* Identification of Danger: 30.
  - \* Identification of the Material: 1.866.
  - \* Danger label No. 3.
  
- \* PEROXIDE:
  - \* Class of ADR 5.2      No. of Article ADR 6b.
  - \* Class of RID 5.2      No. of Article RID 6b.
  - \* TREM-Card CEFIC TEC (R) - 52 g01.
  - \* No. UN 3106.
  - \* Convenient loading name: Organic Peroxide Type d.

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### 15. REGULATION INFORMATION.

POLYESTER		
Symbol Xn		Harmful.
R Phrases	R - 36/38	Irritating on the eyes.
	R - 20	Harmful when inhaled.
	R - 10	Flamable.
S Phrases	S - 36/37	Use protective gloves.
	S - 51	Use in ventilated places.
	S - 43	In the case of fire use chemical powder, CO <sub>2</sub> , foam, sprayed water. Do not use jet of water.
	S - 26	In the case of contact with the eyes, wash with abundant water and consult a doctor.
	S - 23	Do not breath in the vapour.

PEROXIDE		
R Phrases	R - 7	May cause fires.
	R - 22	Harmful when ingested.
	R - 34	May cause burning.
S Phrases	S - 3/7	Keep the container closed and in a fresh place.
	S - 14	Keep away from reducers, acids, alkalis and compounds based on heavy metals.
	S - 36/37/39	Use suitable clothing, protective gloves and protection on the face.
	S - 45	In the case of accident or sickness, consult a doctor immediately.
	S - 50	Do not mix with accelerators or reducing agents.

### 16. OTHER INFORMATION.

- \* The information provided here is supplied in good faith and in accordance with the best of our knowledge, and does not necessarily imply any guarantee.
- \* The receiver of our product must observe the legal stipulations of each country.