

**Fixer 9**
**Safety Data Sheet**
**1. Identification of the substance/mixture and of the company/undertaking**
**1.1. Product identifier**

Code:	<b>SCHS00300_</b>
Product name	<b>Fixer 9</b>
Chemical name and synonym	<b>Acid watery solution</b>

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

Intended use	<b>Chemical hardener for emulsion</b>
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**1.3. Details of the supplier of the safety data sheet**

Name	<b>SAATI S.P.A.</b>		
Full address	<b>VIA MILANO 14</b>		
District and Country	<b>22070 APPIANO GENTILE</b>	<b>(CO)</b>	
	<b>ITALIA</b>		
	<b>Tel. +39 0319711</b>		
	<b>Fax +39 031933392</b>		

e-mail address of the competent person responsible for the Safety Data Sheet	<b>info.it@saatichem.com</b>
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**1.4. Emergency telephone number**

For urgent inquiries refer to	<b>SAATI SPA - tel+39 0319711 - fax+39 031933392</b>
	<b>CAV Ospedale Niguarda Milano tel+39 0266101029</b>
	<b>CAV IRCCS Fond.Maugeri Pavia tel+39 038224444</b>
	<b>CAV Policlinico Gemelli Roma tel+39 063054343</b>
	<b>CAV Ospedale Cardarelli Napoli tel+39 0817472870</b>

**2. Hazards identification.**
**2.1. Classification of the substance or mixture.**

The product is classified as hazardous pursuant to the provisions set forth in Directives 67/548/EEC and 1999/45/EC and/or 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.

Danger Symbols:	<b>C</b>
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R phrases:	<b>35</b>
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The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

**2.2. Label elements.**

Hazard labelling pursuant to Directives 67/548/EEC and 1999/45/EC and subsequent amendments and supplements.



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|------------------|--|
| <b>R35</b>       | <b>CAUSES SEVERE BURNS.</b>  |
| <b>S26</b>       | <b>IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.</b> |
| <b>S28</b>       | <b>AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH PLENTY OF WATER.</b>                               |
| <b>S36/37/39</b> | <b>WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE PROTECTION.</b>                            |

**S45** IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).

Contains: GLYOXAL  
 May produce an allergic reaction.

### 2.3. Other hazards.

Information not available.

## 3. Composition/information on ingredients.

### 3.1. Substances.

Information not relevant.

### 3.2. Mixtures.

Contains:

Identification.	Conc. %.	Classification 67/548/EEC.	Classification 1272/2008 (CLP).
<b>HYDROCHLORIC ACID</b>			
CAS. -	1 - 5	C R34, Xi R37, Note B	Skin Corr. 1B H314, STOT SE 3 H335, Note B
EC. 231-595-7			
INDEX. 017-002-01-X			
<b>P-TOLUENESULPHONIC ACID (H<sub>2</sub>SO<sub>4</sub> &lt; 5%)</b>			
CAS. 104-15-4	1 - 5	Xi R36/37/38	Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335
EC. 203-180-0			
INDEX. 016-030-00-2			
<b>METHANESULPHONIC ACID</b>			
CAS. 75-75-2	1 - 5	C R34	Skin Corr. 1B H314
EC. 200-898-6			
INDEX. 607-145-00-4			

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)

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

## 4. First aid measures.

### 4.1. Description of first aid measures.

EYES: Irrigate copiously with clean, fresh water for at least 15 minutes.

Seek medical advice.

SKIN: Immediately wash with plenty of water. Remove all contaminated clothing. Obtain immediate medical attention. Wash contaminated clothing separately before using them again.

INHALATION: Remove to open air. If breathing is irregular or stopped, administer artificial respiration. Obtain immediate medical attention.

INGESTION: Obtain immediate medical attention. Induce vomiting only if indicated by the doctor. Give nothing by mouth to an unconscious person.

### 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.

Follow doctor's orders.

## 5. Firefighting measures.

### 5.1. Extinguishing media.

SUITABLE EXTINGUISHING MEDIA

The extinction equipment should be of the conventional kind: carbon dioxide, foam, powder and nebulised water.

EXTINGUISHING MEDIA WHICH SHALL NOT BE USED FOR SAFETY REASONS

None in particular.

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

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

Do not breathe combustion products (carbon oxide, toxic pyrolysis products, etc).

**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**

Hardhat with visor, fireproof clothing (fireproof jacket and trousers with straps around arms, legs and waist), work gloves (fireproof, cut proof and dielectric), a depressurised mask with facemask covering the whole of the operator's face or a self-respirator (self-protector) in the event of large quantities of fume.

**6. Accidental release measures.**

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

Wear appropriate protective equipment. Send away individuals who are not suitably equipped. Use breathing equipment if fumes or powders are released into the air. Block the leakage if there is no hazard. Do not handle damaged containers or the leaked product before donning appropriate protective gear. For information on risks for the environmental and health, respiratory tract protection, ventilation and personal protection equipment, refer to the other sections of this sheet.

**6.2. Environmental precautions.**

The product must not penetrate the sewers, surface water, ground water and neighbouring areas. Dilute the product well with water after collection.

**6.3. Methods and material for containment and cleaning up.**

For liquid products, suck into a suitable container (made of material not incompatible with the product) and soak up any leaked product with absorbent inert material (sand, vermiculite, diatomaceous earth, Kieselguhr, etc). Collect the majority of the remaining material and deposit in containers for disposal. For solid products, use spark proof mechanical tools to collect the leaked product and place in plastic containers. If there are no contraindications, use jets of water to eliminate product residues. Make sure the leakage site is well aired. 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.

**7. Handling and storage.**

**7.1. Precautions for safe handling.**

Do not smoke while handling and use.

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

Store in a well ventilated place, keep far away from sources of heat, bright flames and sparks and other sources of ignition.

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

Information not available.

**8. Exposure controls/personal protection.**

**8.1. Control parameters.**

Name	Type	Country	TWA/8h		STEL/15min		
			mg/m3	ppm	mg/m3	ppm	
HYDROCHLORIC ACID	TLV-ACGIH						2 (C)
C = CEILING.							

**8.2. Exposure controls.**

Engineering Controls: Provide adequate ventilation to control air contaminants below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Aspiratory system is recommended.

RESPIRATORY PROTECTION: If exposure levels exceed the PEL/TLV levels, use approved respirator.

SKIN PROTECTION: Nitrile gloves are required to prevent skin contact.

EYE PROTECTION: Safety glasses required.

OTHER PROTECTION : Face Shield and apron are recommended.

## 9. Physical and chemical properties.

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

Appearance	liquid
Colour	colourless
Odour	odourless
Odour threshold.	Not available.
pH.	0,7
Melting or freezing point.	Not available.
Boiling point.	> 100 °C.
Distillation range.	Not available.
Flash point.	Not applicable.
Evaporation Rate	N.A.
Flammability of solids and gases	Not available.
Lower inflammability limit.	Not available.
Upper inflammability limit.	Not available.
Lower explosive limit.	Not applicable.
Upper explosive limit.	Not available.
Vapour pressure.	Not available.
Vapour density	N.A.
Specific gravity.	1,027 Kg./l.
Solubility	soluble in water
Partition coefficient: n-octanol/water	N.A.
Ignition temperature.	Not available.
Decomposition temperature.	Not available.
Viscosity	Not available.
Reactive Properties	N.A.

### 9.2. Other information.

Solid content:	5,00 %
VOC (Directive 1999/13/EC) :	0
VOC (volatile carbon) :	0

## 10. Stability and reactivity.

### 10.1. Reactivity.

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

METHANESULPHONIC ACID: decomposes when hot (above 180°C).

### 10.2. Chemical stability.

The product is stable in normal conditions of use and storage.

### 10.3. Possibility of hazardous reactions.

The vapours may also form explosive mixtures with the air.

HYDROCHLORIC ACID: risk of explosion on contact with alkaline metals, aluminium powder, hydrogen cyanide, alcohol.

METHANESULPHONIC ACID: risk of explosion on contact with: ethyl vinyl ether and hydrogen fluoride. Reacts violently with alkalis.

### 10.4. Conditions to avoid.

Avoid overheating, electrostatic discharge and all sources of ignition.

### 10.5. Incompatible materials.

HYDROCHLORIC ACID: alkalis, organic substances, strong oxidants and metals.

METHANESULPHONIC ACID: corrosive for steel, iron, copper, lead and brass.

### 10.6. Hazardous decomposition products.

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

HYDROCHLORIC ACID: above decomposition temperature hydrochloric acid fumes may develop.

METHANESULPHONIC ACID: sulphur oxides, sulphuric acid vapours.

## 11. Toxicological information.

### 11.1. Information on toxicological effects.

This product is corrosive and causes serious burns and vesicles on the skin, which can arise even after exposure. Burns are very stinging and painful. Upon contact with eyes, it may cause serious harm, such as cornea opacity, iris lesions, irreversible eye coloration. Possible vapours are caustic for the respiratory system and may cause pulmonary edema, whose symptoms sometimes arise only after some hours. Exposure symptoms may include: sting, cough, asthma, laryngitis, respiratory disorders, headache, nausea and sickness. If swallowed, it may cause mouth, throat and oesophagus burns, sickness, diarrhoea, edema, larynx swelling and, consequently, asphyxia. Perforation of the gastro-intestinal tract is also possible.

METHANESULPHONIC ACID  
 LD50 (Oral): 1100 mg/kg rat  
 LD50 (Dermal): 2000 mg/kg rabbit

## 12. Ecological information.

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

### 12.1. Toxicity.

P-TOLUENESULPHONIC ACID (H<sub>2</sub>SO<sub>4</sub> < 5%)  
 EC50 (48h): > 100 mg/l DAPHNIA

HYDROCHLORIC ACID  
 LC50 (96h): 20 mg/l *Iepomis macrochirus*

METHANESULPHONIC ACID  
 LC50 (96h): 73 mg/l *Oncorhynchus mykiss*  
 IC50 (72h): 20 mg/l *Selenastrum capricornutum*  
 EC50 (48h): 70 mg/l *Daphnia* pH=3,5

### 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.

Information not available.

### 12.6. Other adverse effects.

Information not available.

## 13. Disposal considerations.

### 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.

CONTAMINATED PACKAGING

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

## 14. Transport information.

These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the provisions set out in the current edition of the Code of International Carriage of Dangerous Goods by Road (ADR) and in all the applicable national regulations.

These goods must be packed in their original packagings or in packagings made of materials resistant to their content and not reacting dangerously with it. People loading and unloading dangerous goods must be trained on all the risks deriving from these substances and on all actions that must be taken in case of emergency situations.

**Fixer 9**
**Road and rail transport:**

ADR/RID Class: 8 UN: 3264  
 Packing Group: III  
 Label: 8  
 Proper Shipping Name:


**Carriage by sea (shipping):**

IMO Class: 8 UN: 3264  
 Packing Group: III  
 Label: 8  
 EMS: F-A, S-B  
 Marine Pollutant: NO


**Transport by air:**

IATA: 8 UN: 3264  
 Packing Group: III  
 Label: 8  
 Cargo:  
 Packaging instructions: 820 Maximum quantity: 60  
 Pass.:  
 Packaging instructions: 818 Maximum quantity: 5


**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.

Product.  
 Point. 3

Substances in Candidate List (Art. 59 REACH).  
 None.

Substances subject to authorisation (Annex XIV REACH).  
 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.

TAB. C Classe 3 02,00 %

**15.2. Chemical safety assessment.**

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

**16. Other information.**

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

**Skin Corr. 1B** Skin corrosion, category 1B  
**STOT SE 3** Specific target organ toxicity - single exposure, category 3  
**Eye Irrit. 2** Eye irritation, category 2  
**Skin Irrit. 2** Skin irritation, category 2  
**H314** Causes severe skin burns and eye damage.  
**H319** Causes serious eye irritation.

**H315** Causes skin irritation.  
**H335** May cause respiratory irritation.

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

**R34** CAUSES BURNS.  
**R35** CAUSES SEVERE BURNS.  
**R36/37/38** IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.  
**R37** IRRITATING TO RESPIRATORY SYSTEM.

#### 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. The Merck Index. - 10th Edition
8. Handling Chemical Safety
9. Niosh - Registry of Toxic Effects of Chemical Substances
10. INRS - Fiche Toxicologique (toxicological sheet)
11. Patty - Industrial Hygiene and Toxicology
12. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition

#### 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.

#### Changes to previous review:

The following sections were modified:

01 / 03 / 08 / 15 / 16.