

## Safety Data Sheet

### 1. Identification of the substance / preparation and the Company

#### 1.1 Identification of the substance or preparation

Product name Ultrafix SB2 Plus  
Chemical name and synonym Polyurethane solution in organic solvent

#### 1.2 Use of the substance / preparation

Intended use Adhesive

#### 1.3 Company identification

Name SAATI SPA  
Full address VIA MILANO 14  
District and Country 22070 APPIANO GENTILE (CO)  
ITALY  
Tel. +390319711  
Fax +39031933392

#### 1.4 Emergency telephone

SAATI S.p.A  
Tel. +390319711  
Fax +39031933392

For urgent inquiries refer to

Centro Antiveleni  
Ospedale Niguarda  
Tel. +390266101029

### 2. Composition / Information on ingredients

Contains:

Name	Concentration C	Classification
ACETONE	58 <= C < 62	R66 R67
Cas No 67-64-1		
CE No 200-662-2		F R11
Index No 606-001-00-8		Xi R36
ETHYL ACETATE	24 <= C < 25,5	R66
Cas No 141-78-6		R67
CE No 205-500-4		F R11
Index No 607-022-00-5		Xi R36

Pentamethyldiethylenetriamine	0,1 <= C < 0,15	T	R24
Cas No 3030-47-5		C	R34
CE No 221-201-1		Xn	R22
Index No 612-109-00-6			

The complete text of -R- phrases is specified in section 16.

### 3. Hazards Identification

#### 3.1 Substance/Preparation Classification

This preparate is dangerous under 67/548/EEC and 1999/45/EC regulations and subsequent amendments. Therefore, this preparate requires a safety data sheet according to the 91/155/EC regulation and subsequent amendments. Further information on health and/or environmental hazards can be found in sections 11 and 12 of this sheet.

Danger Symbols: F-Xi  
Phrases R: 11-36-66-67

#### 3.2 Danger Identification

Because of its chemical-physical features, this product is graded as highly flammable (flash-point below 21 °C).  
IRRITATING TO EYES.  
REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING.  
VAPOURS MAY CAUSE DROWSINESS AND DIZZINESS.

### 4. First aid measures

EYES: Wash immediately with plenty of water for at least 15 minutes and seek medical advice at once.  
SKIN: Immediately take off all contaminated clothing and have a shower. Seek medical advice.  
INGESTION: Have the patient drink water as much as possible and seek medical advice immediately. Do not induce vomiting before consulting a doctor.  
INHALATION: Immediately seek medical advice. In the meantime, remove the patient to open air, far from the contaminated premises; if respiration stops or is difficult, give an artificial respiration adopting the proper measure for the helper.

### 5. Fire-fighting measures

Closed containers exposed to the heat of a fire may lead to pressure rise and explode. For information on environmental and health risks, protection of the respiratory airways, ventilation and individual protective measures, refer to the other sections of this sheet.

Extinguishing measures: CO<sub>2</sub>, foam, chemical powder for flammable liquids. Water may not be effective to extinguish the fire, nevertheless it should be used to cool the containers exposed to flames and prevent fires and explosions. For leakage and spillage that have not caught fire, nebulized water may be used to disperse the flammable vapours and protect the people involved in stopping the leakage.

Equipment: wear equipment complete with helmet and face shield and protection of the neck, selfbreathing apparatus at pressure or demand, insulative jacket and trousers, with bands around the arms, legs and waist.

## 6. Accidental release measures

Exclude sources of ignition. Cover with inert absorbent material. Collect spillages by means of sparkproof equipment. Use water only to remove residuals, so as not to run the risk of entering the sewer.

Do not let the product dry. Contaminated clothes must be left to soak in water before washing. In order to choose safety measures and protection equipment, please see the other sections of this sheet.

Spillage in waters: remove the liquid from the surface with flameproof pumps or manual pumps or suitable absorbent material. Resort to sinking and/or dispersion of the product with suitable substances in open waters, if permitted by the law.

Do not allow the product to dry in order to avoid risk of combustion. Eliminate all sources of ignition. Cover with inert absorbent material and collect the resulting mass with non sparking tools.

Use water only to remove the residues in order to avoid spillage of the product in the drainage system. For information regarding environmental and health risks and protective measures, refer to the specific sections of this sheet.

## 7. Handling and storage

Avoid the accumulation of electrostatic charges. Store the containers sealed and in a well ventilated place. Vapours may ignite with explosion, it is therefore necessary to avoid accumulation keeping the windows and doors open, ensuring cross ventilation.

Without adequate ventilation, the vapours may accumulate at the bottom and ignite at a distance, if triggered off, with the risk of flashback. Keep far away from sources of heat, sparks and naked flames. Do not smoke, use matches or lighters. Kept the containers earthed while decanting and wear antistatic boots.

Vigorous stirring and flow through the pipings and equipment may cause the formation and accumulation of electrostatic charges due to the low conductivity of the product. In order to avoid the risk of fire outbreak and explosion never use compressed air during movement.

## 8. Exposure control / personal protection.

ACETONE			
- TLV TWA	1188	mg/m <sup>3</sup>	ACGIH
- TLV STEL	1782	mg/m <sup>3</sup>	ACGIH
- OEL	1210	mg/m <sup>3</sup>	EU (8h)

ETHYL ACETATE  
- TLV TWA

1440 mg/m<sup>3</sup> ACGIH

In order to minimize exposure as far as possible, it is strongly recommended to use adequate individual protective measures, such as: masks suitable for the product, goggles, gloves and overall. Do not eat, drink or smoke while handling it. Accurately wash the hands with soap and water before meals and at the end of the work shift.

## 9. Physical and chemical properties

Colour	Blue
Odour	Aromatic
Appearance	Liquid
Solubility	Soluble in organic solvents
Viscosity	650mPa*s
Vapour density	N.A.
Evaporation speed	N.A.
Comburent properties	N.A.
Partition coefficient: n-octanol/water	N.A.
pH	N.A.
Boiling point	>65°C
Flash point	<-12°C
Explosive properties	N.A.
Vapour pressure	132mmHg
Specific gravity	0,871Kg/l
Solid content:	16,00 %
VOC:	84,08 % - 732,08g/litre of preparation
VOC (volatile carbon) :	50,26 % - 437,63g/litre of preparation

## 10. Stability and reactivity

The product is stable in normal conditions of use and storage. When heated or in the event of a fire, carbonoxides may be released and vapours which are dangerous to health. The vapours may also form explosive mixtures with the air.

Acetone reacts violently with chloroform in basic ambient with the risk of fires and explosions (ref. Handling chemicals safely).

Ethyl acetate may decompose when heated with water and reacts with strong oxidizing agents (see INRS NIS FORM N18, ED. 1991).

## 11. Toxicological information

Acute effects: stinging eyes. Symptoms may include: rubescence, edema, pain and lachrymation. Vapour inhalation may moderately irritate the upper respiratory tract. Contact with skin may cause slight irritation. Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

This product may have a degreasing action on the skin, producing dryness and chapped skin after repeated exposure.

This product contains highly volatile substances, which may cause serious depression of the central nervous system (CNS) and have negative effects, such as drowsiness, dizziness, slow reflexes, narcosis.

Pentamethyldiethylenetriamine:

Acute toxicity

LD50(dermal, rabbit):230mg/Kg

LD50(oral, rat):1330mg/Kg

## 12. Ecological information

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

Pentamethyldiethylenetriamine:

Slightly biodegradable

## 13. Disposal consideration

Consult the supplier for possible special inactivation treatment and/or regeneration. Do not incinerate together with waste.

## 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 packaging or in packaging 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.

### Road and rail transport:

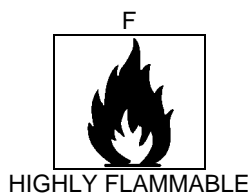
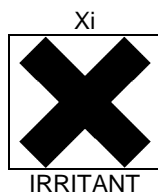
ADR:	3
UN:	1866
Packing Group:	II
Label:	3
Proper Shipping Name:	RESIN SOLUTION

**Carriage by sea (shipping):**

IMO class: 3  
UN: 1866  
Packing Group: II  
Label: 3  
EMS: F-E, S-E  
Proper Shipping Name: RESIN SOLUTION

**Transport by air:**

IATA: 3  
UN: 1866  
Packing Group: II  
Label: 3

**15. Regulatory information**

R11 HIGHLY FLAMMABLE.  
R36 IRRITATING TO EYES.  
R66 REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING.  
R67 VAPOURS MAY CAUSE DROWSINESS AND DIZZINESS.  
S 9 KEEP CONTAINER IN A WELL-VENTILATED PLACE.  
S16 KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.  
S18 HANDLE AND OPEN CONTAINER WITH CARE.  
S25 AVOID CONTACT WITH EYES.  
S33 TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGES.  
S43 IN CASE OF FIRE, USE SAND, CO2, OR DRY CHEMICAL. NEVER USE WATER

Danger labelling under regulations 67/548/EEC and 1999/45/EC and following amendments and adjustments.

Workers exposed to this chemical agent must undergo health checks according to regulation 98/24/EC.

## 16. Other information

Text of -R- phrases quoted in section 2 of the sheet.

R11	HIGHLY FLAMMABLE.
R22	HARMFUL IF SWALLOWED.
R24	TOXIC IN CONTACT WITH SKIN.
R34	CAUSES BURNS.
R36	IRRITATING TO EYES.
R66	REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING.
R67	VAPOURS MAY CAUSE DROWSINESS AND DIZZINESS.

### GENERAL BIBLIOGRAPHY

1. Regulation 1999/45/CE and following amendments;
2. Regulation 67/548/CEE and following amendments and adjustments (XXIX A.T.P.);
3. Regulation 91/155/CEE and following amendments;
4. The Merck Index. - 10th Edition;
5. Handling Chemical Safety;
6. Niosh - Registry of Toxic Effects of Chemical Substances;
7. INRS - Fiche Toxicologique (toxicological sheet);
8. Patty - Industrial Hygiene and Toxicology;
9. 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.