



## Safety Data Sheet

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

#### 1.1 Identification of the substance or preparation

Product name DEV-P1

#### 1.2 Use of the substance / preparation

Intended use Ready-to-use developer for positive plates.

#### 1.3 Company identification

Name VERONA LASTRE S.R.L.  
Full address VIA CAPPAFREDDA 18/C  
District and Country 37050 ROVERCHIARA (VR)  
ITALIA  
Tel. + 39 0442 685034  
Fax + 39 0442 688070  
Product distribution by VERONA LASTRE S.R.L. - VIA CAPPAFREDDA 18/C - 37050 -  
ROVERCHIARA (VR) - ITALIA

#### 1.4 Emergency telephone

For urgent inquiries refer to  
vela@samor.com  
Centro Antiveleni- Ospedale Niguarda Ca Granda  
Piazza dell'Ospedale Maggiore, 3 20162 Milano (MI)  
Tel. +39 02.66101029  
Centro Antiveleni- Ospedale Maggiore, Largo Bartolo Nigrisoli 2,  
40133 Bologna  
Tel. +39 051 333333

### 2. Composition / Information on ingredients

Contains:

Name	Concentration C	Classification
SODIUM METHASILICATE PENTAHYDRATE	10,2 <= C < 14,3	C R34
Cas No 10213-79-3 CE No 229-912-9		Xi R37

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 directives 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: C  
Phrases R: 34

The classification of the compound, featuring an extreme pH value, is based on the results of an appropriate validated in-vitro test as set out in the 67/548/EEC directive, annex VI, paragraph 3.2.5, and following modifications.

3.2 Danger Identification  
CAUSES BURNS.

#### **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**

Allow containers to cool in order to avoid product decomposition and generation of substances which might injure the health and be dangerous for safety reasons. Wear the fire equipment all the time.

#### **6. Accidental release measures**

Collect the largest amount of the solid product with mechanical tools. Avoid the formation of dust spraying the product with water, if not contraindicated.

#### **7. Handling and storage**

Make sure that equipment is available for cooling the vessels, to prevent the danger of overpressure and overheating in the event of fire in the vicinity. Refer to the other sections of this data sheet for information relating to health and environmental risks.

#### **8. Exposure control / personal protection.**

Against corrosive properties of the product and according to the type of working, suitable protection equipment should be worn. Such as: an helmet to protect the face, the head and the neck, waterproof gloves and overall, resistant to the product.

Do not eat, drink or smoke while handling it; wash carefully the hands with soap and water before meals and after work shift; a shower is recommended.

#### **9. Physical and chemical properties**

Colour	BLEU
Physical state	LIQUID
Solubility	WATER SOLUBLE
Viscosity	N.A.
Vapour density	N.A.
Evaporation speed	N.A.



Comburent properties	N.A.
Partition coefficient: n-octanol/water	N.A.
pH	> 12,5
Boiling point	> 100°C
Flash point	N.A.
Explosive properties	N.A.
Vapour pressure	N.A.
Specific gravity	1,092Kg/l
VOC (Directive 1999/13/EC) :	0
VOC (volatile carbon) :	0

## 10. Stability and reactivity

The product is stable in normal conditions of use and storage. In the event of thermal decomposition or fire, vapours potentially dangerous to health may be released.

Sodium methasilicate: the aqueous solutions behave as strong bases; with 1% of the substance the pH is > 12; they can attack Al, Zn, Sn and their alloys and react violently with acids; the substance is not combustible.

## 11. Toxicological information

This product is corrosive and causes abrasions of skin surface, accompanied by rubefaction, warmth and sting. In the most serious cases, small vesicles appear, which cause strong sting and pain. 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.

LD50 (ratto orale): 1153 mg/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.

LC50 (pesce): 210 mg/l/96h  
EC50 (Daphnia magna): 1700 mg/l/48h  
EC50 (alghe): 207 mg/l/72h  
EC50 (batteri) > 100 mg/l/3h

## 13. Disposal consideration

Consider the possibility of burning the product in a suitable incenerator.  
Acid or basic products must always be neutralized before undergoing any treatment, including biological treatment whenever feasible. If the waste is solid, it can be disposed of in a landfill.

## 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.

**Road and rail transport:**

ADR: 8  
UN: 1719  
Packing Group: II  
Label: 8  
Nr. Kemler: 80  
Proper Shipping Name: CAUSTIC ALKALINE LIQUID N.O.S.

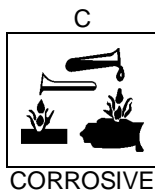
**Carriage by sea (shipping):**

IMO class: 8  
UN: 1719  
Packing Group: II  
Label: 8  
EMS: F-A, S-B  
Proper Shipping Name: CAUSTIC ALKALI LIQUID N.O.S.

**Transport by air:**

IATA: 8  
UN: 1719  
Packing Group: II  
Label: 8  
Cargo:  
Packaging instructions: 813  
Maximum quantity: 30 L  
Pass.:  
Packaging instructions: 809  
Maximum quantity: 1 L

**15. Regulatory information**



R34 CAUSES BURNS.  
S26 IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.  
S36/37/39 WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE PROTECTION.  
S45 IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).

Contains:  
SODIUM METHASILICATE PENTAHYDRATE

The classification of the compound, featuring an extreme pH value, is based on the results of an appropriate validated in-vitro test as set out in the 67/548/EEC directive, annex VI, paragraph 3.2.5, and following modifications.

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



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 regulation is respected.

The product does not include any raw material listed in tabs n. 1,2,3 of the law n. 496 of 18th November 1995 regarding the toxicological substances usable as chemicals weapons and their precursors (ratification and execution of the Paris Convention of 13th of January 1993).

## **16. Other information**

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

R34 CAUSES BURNS.  
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 (technical adjustment XXIX);
3. Directive 91/155/EEC 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.

### **Changes to previous review**

The following sections were modified:

01 / 09 / 11 / 12