

**Safety data sheet**  
**according to 1907/2006/EC, Article 31**

Printing date 16.04.2014

Version number 1

Revision: 16.04.2014

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

- **1.1 Product identifier**
- **Trade name:** Révélateur positif, sachet 1 litre Réf : AR45  
Positive developer, 1 liter bag Ref : AR45
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
commercial and / or industrial use
- **Application of the substance / the preparation :** Reagent
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
CIF  
240 rue Hélène Boucher  
78530 BUC  
Tél : 01.39.66.96.83 – Fax 01.33.66.97.78  
E-mail : cif@cif.fr – Web : www.cif.fr
- **1.4 Emergency telephone number:**  
France (ORFILA 24h/24) - Tel : +33 (0)1 45 42 59 59  
Ireland - Tel : 00 353 1 8092568 - 00 353 1 8379964 (24h/24)  
EU Tel : 112

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008 :**  
 **GHS05**  
  
Met. Corr.1 H290 May be corrosive to metals.  
Skin Corr. 1A H314 Causes severe skin burns and eye damage.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC :**  
 **C; Corrosive**  
  
R35: Causes severe burns.
- **Information concerning particular hazards for human and environment:**  
The product has to be labelled in the latest valid version according to the calculation procedure of the "General Classification guideline for preparations of the EU" .
- **Classification system:**  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- **2.2 Label elements**
- **Labelling according to EU guidelines:**  
The product has been marked in accordance with EU Directives / respective national laws.  
2008/58/CE (30eme ATP) ; 2009/2/CE (31eme ATP) ; 2006/8/CE
- **Code letter and hazard designation of product:**  
 **C Corrosive**
- **Hazard-determining components of labelling:**  
sodium hydroxide

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- **Risk phrases:**
  - 35 Causes severe burns.
- **Safety phrases:**
  - 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  - 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
  - 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
  - 60 This material and its container must be disposed of as hazardous waste.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterization: Mixtures**
- **Description:** Mixture: consisting of the following components.

- **Dangerous components:**

CAS: 1310-73-2 EINECS: 215-185-5 Index number: 011-002-00-6	sodium hydroxide	 C R35  Skin Corr. 1A, H314	50-100%
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- **Additional information:** For the wording of the listed risk phrases, refer to section 16.

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After excessive inhalation:**
  - In case of unconsciousness place patient in a stable laying down side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed :**
  - No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed :**
  - No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Suitable extinguishing agents:**
  - CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture :**
  - During heating or in case of fire poisonous gases are produced.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

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### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures :**  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Use neutralizing agent.  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **6.4 Reference to other sections :**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protective equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling :**  
Open and handle receptacle with care.  
Prevent formation of dust.  
Keep receptacles tightly sealed.  
Thorough dedusting.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:**  
Store away from metals.  
Store away from foodstuffs.  
Do not store together with acids.  
Store away from water.
- **Further information about storage conditions:**  
Store receptacle in a well ventilated area.  
Protect from heat and direct sunlight.  
This product is hygroscopic.  
Protect from humidity and water.  
Keep container tightly sealed.
- **7.3 Specific end use(s) :** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see section 7.
- **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

**1310-73-2 sodium hydroxide (50-100%)**

WEL (Great Britain)	Short-term value: 2 mg/m <sup>3</sup>
MAK (Switzerland)	Short-term value: 2 e mg/m <sup>3</sup> Long-term value: 2 e mg/m <sup>3</sup> SSc;

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· **Additional information:**

As a basis for the production of this document, the most current valid lists were used.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from food, beverages and petfood.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Respiratory protection:** Not required.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Gloves material :**

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which may vary from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked before use.

· **Eye protection:**



Tightly sealed goggles

## SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

**Form:** Solid

**Colour:** White

· **Odour:** Odourless

· **Odour threshold:** Not determined.

· **pH-value (100 g/l) at 20 °C:** >14

· **Change in condition**

**Melting point/Melting range:** 319 °C

**Boiling point/Boiling range:** 1390 °C

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not determined.

· **Ignition temperature:** Not applicable.

· **Decomposition temperature:** Not determined.

· **Self-igniting:** Product is not self igniting.

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· **Danger of explosion:** *Product does not present an explosion hazard.*

· **Explosion limits:**

**Lower:** *Not determined.*

**Upper:** *Not determined.*

· **Vapour pressure:** *Not applicable.*

· **Density at 20 °C:** *2.13 g/cm<sup>3</sup>*

· **Relative density :** *Not determined.*

· **Vapour density :** *Not applicable.*

· **Evaporation rate :** *Not applicable.*

· **Solubility in / Miscibility with water at 20 °C:** *1260 g/l*

· **Segregation coefficient (n-octanol/water):** *Not determined.*

· **Viscosity:**

**Dynamic:** *Not applicable.*

**Kinematic:** *Not applicable.*

· **Solvent content:**

**VOC (EC)** *0.00 %*

· **9.2 Other information :** *No further relevant information available.*

### SECTION 10: Stability and reactivity

· **10.1 Reactivity**

· **10.2 Chemical stability**

· **Thermal decomposition / conditions to be avoided:** *No decomposition if used according to specifications.*

· **10.3 Possibility of hazardous reactions :**

*Reacts with water and acids.*

*Reacts with light alloys in the presence of moisture to form hydrogen.*

· **10.4 Conditions to avoid :** *No further relevant information available.*

· **10.5 Incompatible materials:** *No further relevant information available.*

· **10.6 Hazardous decomposition products:** *Hydrogen*

### SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

*1310-73-2 sodium hydroxide*

Oral	LD50	2000 mg/kg (rat)
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· **Primary irritant effect:**

· **On the skin:** *Strong caustic effect on skin and mucous membranes.*

· **On the eyes:** *Strong caustic effect.*

· **Sensitization:** *No sensitizing effects known.*

· **Additional toxicological information:**

*The product shows the following hazards according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:*

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Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability :** No further relevant information available.
- **12.3 Bioaccumulative potential :** No further relevant information available.
- **12.4 Mobility in soil :** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.  
Must not reach sewage water or drainage ditch undiluted or unneutralized.  
Throwing away bigger amounts into drains or aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the diluted product used, the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only slightly polluting for water.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects :** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
  - **Recommendation :**
- 

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
  - **Recommendation:** Disposal must be made according to official regulations.
  - **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

- |                                       |                              |
|---------------------------------------|------------------------------|
| · <b>14.1 UN-Number</b>               |                              |
| · <b>ADR, IMDG, IATA</b>              | UN1823                       |
| · <b>14.2 UN proper shipping name</b> |                              |
| · <b>ADR</b>                          | 1823 SODIUM HYDROXIDE, SOLID |
| · <b>IMDG, IATA</b>                   | SODIUM HYDROXIDE, SOLID      |

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· **14.3 Transport hazard class(es)**

· **ADR**



· **Class** 8 (C6) Corrosive substances.  
· **Label** 8

· **IMDG, IATA**



· **Class** 8 Corrosive substances.  
· **Label** 8

· **14.4 Packing group**

· **ADR, IMDG, IATA** II

· **14.5 Environmental hazards:**

· **Marine pollutant:** No

· **14.6 Special precautions for user**

· **Danger code (Kemler):** Warning: Corrosive substances.  
· **EMS Number:** 80  
· **Segregation groups** F-A, S-B  
Alkalis

· **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**

· **ADR**

· **Limited quantities (LQ)** 1 kg  
· **Transport category** 2  
· **Tunnel restriction code** E

· **UN "Model Regulation":**

UN1823, SODIUM HYDROXIDE, SOLID, 8, II

**SECTION 15: Regulatory information**

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information**

This information 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.

· **Relevant phrases**

H314 Causes severe skin burns and eye damage.

R35 Causes severe burns.

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**· Abbreviations and acronyms:**

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*IMDG: International Maritime Code for Dangerous Goods*

*IATA: International Air Transport Association*

*GHS: Globally Harmonized System of Classification and Labelling of Chemicals*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*ELINCS: European List of Notified Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*VOC: Volatile Organic Compounds (USA, EU)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

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