

# SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

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

### 1.1 Product identifier

**Product name:** PL10RI

**Product No.:** 000001014846

**Synonyms, Trade Names:** N-100 Replenisher

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

**Identified uses:** Offset plate developer solution

**Uses advised against:** Reserved for industrial and professional use.

### 1.3 Details of the supplier of the safety data sheet

#### Manufacturer

Agfa Graphics NV  
Septestraat 27  
2640 Mortsel  
Belgium

**Telephone:** +32 3 4442111

**Fax:** +32 3 4447094

**E-mail:** electronic.sds@agfa.com

#### National Supplier

Agfa-Gevaert Ltd.  
Vantage West  
Great West Road  
Brentford, Middlesex TW8 9AX  
United Kingdom

**Telephone:** +44 (0)20 8 231 4616

**Fax:** +44 (0)20 8 231 4951

**E-mail:** electronic.sds@agfa.com

### 1.4 Emergency telephone number:

Emergency telephone number (Belgium) : +32 3 4443333 (24h/24h)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

The product has been classified according to the legislation in force.

**Classification according to Regulation (EC) No 1272/2008 as amended.**

#### Health Hazards

Skin irritation

Category 2

H315: Causes skin irritation.

Serious eye damage

Category 1

H318: Causes serious eye damage.

### 2.2 Label Elements

#### Contains:

potassium silicate  
Potassium hydroxide



**Signal Word:** Danger

**Hazard Statement(s):** H318: Causes serious eye damage.  
H315: Causes skin irritation.

#### Precautionary Statements

**Prevention:** P280: Wear protective gloves/protective clothing/eye protection/face protection.

**Response:** P310: Immediately call a POISON CENTER/doctor/...  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**2.3 Other hazards** Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria Not fulfilling vPvB (very persistent/very bioaccumulative) criteria

### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

**General information:** No data available.

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes
potassium silicate	1 - <3%	1312-76-1	215-199-1	01-2119456888-17-0001	No data available.	
Potassium hydroxide	2 - <3%	1310-58-3	215-181-3	01-2119487136-33-XXXX	No data available.	#

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

# This substance has workplace exposure limit(s).

#### Classification

Chemical name	Classification	Notes
potassium silicate	Skin Corr.: 1B: H314 Eye Dam.: 1: H318	
Potassium hydroxide	Met. Corr.: 1: H290 Skin Corr.: 1A: H314 Eye Dam.: 1: H318 Acute Tox.: 4: H302	No data available.

The full text for all H-statements is displayed in section 16.

CLP: Regulation No. 1272/2008.

### SECTION 4: First aid measures

**General:** CAUTION! First aid personnel must be aware of own risk during rescue!

#### 4.1 Description of first aid measures

<b>Inhalation:</b>	Move to fresh air.
<b>Skin Contact:</b>	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. Get medical attention.
<b>Eye contact:</b>	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately.
<b>Ingestion:</b>	Call a POISON CENTRE/doctor/ if you feel unwell. Rinse mouth.
<b>4.2 Most important symptoms and effects, both acute and delayed:</b>	See section 11 of the SDS for additional information on health hazards.
<b>4.3 Indication of any immediate medical attention and special treatment needed</b>	
<b>Hazards:</b>	See section 11 of the SDS for additional information on health hazards.
<b>Treatment:</b>	Get medical attention if symptoms occur.

## SECTION 5: Firefighting measures

<b>General Fire Hazards:</b>	No unusual fire or explosion hazards noted.
<b>5.1 Extinguishing media</b>	
<b>Suitable extinguishing media:</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media:</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>5.2 Special hazards arising from the substance or mixture:</b>	During fire, gases hazardous to health may be formed.
<b>5.3 Advice for firefighters</b>	
<b>Special fire fighting procedures:</b>	No data available.
<b>Special protective equipment for fire-fighters:</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

## SECTION 6: Accidental release measures

<b>6.1 Personal precautions, protective equipment and emergency procedures:</b>	Use personal protective equipment. Put on protective equipment before entering danger area.
<b>6.2 Environmental Precautions:</b>	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.
<b>6.3 Methods and material for containment and cleaning up:</b>	Stop the flow of material, if this is without risk. Absorb with sand or other inert absorbent.
<b>6.4 Reference to other sections:</b>	See Section 8 of the SDS for Personal Protective Equipment. For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage:

**7.1 Precautions for safe handling:** Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**7.2 Conditions for safe storage, including any incompatibilities:** Store away from incompatible materials.

**7.3 Specific end use(s):** Reserved for industrial and professional use.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control Parameters

#### Occupational Exposure Limits

Chemical name	Type	Exposure Limit Values	Source
Potassium hydroxide	STEL	2 mg/m3	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)

#### DNEL-Values

Critical component	Type	Route of Exposure	Health Warnings	Remarks
potassium silicate	Workers	Dermal	Systemic, long-term; 1.49 mg/kg	Repeated dose toxicity
	Workers	Inhalation	Systemic, long-term; 5.61 mg/m3	Repeated dose toxicity
	General population	Dermal	Systemic, long-term; 0.74 mg/kg	Repeated dose toxicity
	General population	Oral	Systemic, long-term; 0.74 mg/kg	Repeated dose toxicity
	General population	Inhalation	Systemic, long-term; 1.38 mg/m3	Repeated dose toxicity
Potassium hydroxide	Workers	Inhalation	Local, long-term; 1 mg/m3	Irritating to respiratory system.
	General population	Inhalation	Local, long-term; 1 mg/m3	Irritating to respiratory system.

#### PNEC-Values

Critical component	Environmental compartment	PNEC-Values
potassium silicate	Aquatic (freshwater)	7.5 mg/l
	Sewage treatment plant	348 mg/l
	Aquatic (marine water)	1 mg/l
	Aquatic (intermit. releases)	7.5 mg/l

### 8.2 Exposure controls

**Appropriate Engineering Controls:** Provide adequate ventilation.

#### Individual protection measures, such as personal protective equipment

**General information:** Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. Follow training instructions when handling this material.

**Eye/face protection:** Safety goggles. EN 166.

**Skin protection**

<b>Hand Protection:</b>	Protective gloves should be used if there is a risk of direct contact or splash.(EN374) Chemical resistant gloves required for prolonged or repeated contact. Butyl rubber. Glove thickness: > 0.70 mm Break-through time: > 480 min Risk of splashes: Nitrile rubber. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.
<b>Other:</b>	Safety clothes : long sleeved clothing EN13688
<b>Respiratory Protection:</b>	In case of inadequate ventilation use suitable respirator (EN14387). Seek advice from local supervisor.
<b>Hygiene measures:</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.
<b>Environmental Controls:</b>	Do not empty into drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state:</b>	liquid
<b>Form:</b>	liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	Odorless
<b>Odor Threshold:</b>	No data available.
<b>pH:</b>	13.5 (25 °C)
<b>Freezing point:</b>	< 0 °C (Literature.)
<b>Boiling Point:</b>	> 100 °C (Literature.)
<b>Flash Point:</b>	> 93.33 °C (Literature.) Not combustible.
<b>Evaporation Rate:</b>	Almost no evaporation (20°C).
<b>Flammability (solid, gas):</b>	not applicable
<b>Flammability Limit - Upper (%):</b>	No data available.
<b>Flammability Limit - Lower (%):</b>	No data available.
<b>Vapor pressure:</b>	23.00 hPa (20 °C) (Literature.)
<b>Vapor density (air=1):</b>	not applicable
<b>Density:</b>	No data available.
<b>Relative density:</b>	1.048 (20 °C) (Literature.)
<b>Solubility(ies)</b>	
<b>Solubility in Water:</b>	No data available.
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	not applicable
<b>Autoignition Temperature:</b>	not applicable
<b>Decomposition Temperature:</b>	No data available.
<b>SADT:</b>	No data available.
<b>Viscosity:</b>	No data available.
<b>Explosive properties:</b>	No data available.
<b>Oxidizing properties:</b>	No data available.

### 9.2 Other information

**VOC Content:**

EC Directive 1999/13: 0 g/l ~0 % (calculated)  
EC Directive 2004/42: 0 g/l ~0 % (calculated)

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity:</b>	Material is stable under normal conditions.
<b>10.2 Chemical Stability:</b>	Material is stable under normal conditions.
<b>10.3 Possibility of hazardous reactions:</b>	Not known.
<b>10.4 Conditions to avoid:</b>	Avoid heat or contamination.
<b>10.5 Incompatible Materials:</b>	No data available.
<b>10.6 Hazardous Decomposition Products:</b>	By heating and fire, harmful vapors/gases may be formed.

## SECTION 11: Toxicological information

### Information on likely routes of exposure

<b>Inhalation:</b>	Inhalation is the primary route of exposure. In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
<b>Skin Contact:</b>	Moderately irritating to skin with prolonged exposure. Causes skin irritation.
<b>Eye contact:</b>	Eye contact is possible and should be avoided. Causes serious eye damage.
<b>Ingestion:</b>	May be ingested by accident. Ingestion may cause irritation and malaise.

### 11.1 Information on toxicological effects

#### Acute toxicity

##### Oral

<b>Product:</b>	ATEmix: 16,650 mg/kg
<b>Specified substance(s)</b>	
potassium silicate	LD 50 (Rat): > 5,000 mg/kg Experimental result, Key study
Potassium hydroxide	LD 50 (Rat): 388 mg/kg Experimental result, Key study LD 50 (Rat): 333 mg/kg Experimental result, Key study

##### Dermal

<b>Product:</b>	Not classified for acute toxicity based on available data.
<b>Specified substance(s)</b>	
potassium silicate	LD 50 (Rat) : > 5,000 mg/kg
Potassium hydroxide	No data available.

##### Inhalation

<b>Product:</b>	Not classified for acute toxicity based on available data.
<b>Specified substance(s)</b>	
potassium silicate	No data available.
Potassium hydroxide	No data available.

#### Repeated dose toxicity

**Product:** No data available.

#### Specified substance(s)

potassium silicate

LOAEL (Mouse(Female, Male), Oral, 90 d): 716 mg/kg

Potassium hydroxide

No data available.

#### Skin Corrosion/Irritation:

**Product:** The health hazard evaluation is based on the toxicological properties of a similar material.

#### Specified substance(s)

potassium silicate

No data available.

Potassium hydroxide

No data available.

#### Serious Eye Damage/Eye Irritation:

**Product:** The health hazard evaluation is based on the toxicological properties of a similar material.

#### Specified substance(s)

potassium silicate

in vivo (Rabbit, 24 hrs): Slightly irritating

Potassium hydroxide

in vivo (Rabbit, 24 hrs): Corrosive KOH 5%

in vivo (Rabbit, 5 min): Corrosive KOH 5%

#### Respiratory or Skin

#### Sensitization:

**Product:** No data available.

#### Specified substance(s)

potassium silicate

No data available.

Potassium hydroxide

No data available.

#### Germ Cell Mutagenicity

#### In vitro

**Product:** No data available.

#### Specified substance(s)

potassium silicate

No data available.

Potassium hydroxide

No data available.

#### In vivo

**Product:** No data available.

#### Specified substance(s)

potassium silicate

No data available.

Potassium hydroxide

No data available.

#### Carcinogenicity

**Product:** No data available.

#### Specified substance(s)

potassium silicate

No data available.

Potassium hydroxide

No data available.

#### Reproductive toxicity

**Product:** No data available.

#### Specified substance(s)

potassium silicate

No data available.

Potassium hydroxide

No data available.

#### Specific Target Organ Toxicity - Single Exposure

**Product:** No data available.

#### Specified substance(s)

potassium silicate No data available.  
Potassium hydroxide No data available.

#### Specific Target Organ Toxicity - Repeated Exposure

**Product:** No data available.

#### Specified substance(s)

potassium silicate No data available.  
Potassium hydroxide No data available.

#### Aspiration Hazard

**Product:** No data available.

#### Specified substance(s)

potassium silicate No data available.  
Potassium hydroxide No data available.

### SECTION 12: Ecological information

#### 12.1 Toxicity

##### Acute toxicity

##### Fish

**Product:** No data available.

#### Specified substance(s)

potassium silicate LC 50 (Leuciscus idus, 48 h): > 146 mg/l (Static) experimental result  
Potassium hydroxide NOAEL (24 h): 28 mg/l experimental result  
NOAEL (Gambusia affinis, 96 h): 56 mg/l (Static) experimental result  
LC 50 (Gambusia affinis, 96 h): 80 mg/l (Static) experimental result  
LC 50 (Poecilia reticulata, 24 h): 165 mg/l (Static) experimental result

##### Aquatic Invertebrates

**Product:** No data available.

#### Specified substance(s)

potassium silicate EC 50 (24 h): > 146 mg/l (Static) experimental result  
Potassium hydroxide EC 100 (2 d): > 10 mg/l experimental result

#### Chronic Toxicity

##### Fish

**Product:** No data available.

#### Specified substance(s)

potassium silicate No data available.  
Potassium hydroxide No data available.

##### Aquatic Invertebrates

**Product:** No data available.

#### Specified substance(s)

potassium silicate No data available.  
Potassium hydroxide No data available.



#### Toxicity to Aquatic Plants

**Product:** No data available.

#### Specified substance(s)

potassium silicate No data available.  
Potassium hydroxide No data available.

### 12.2 Persistence and Degradability

#### Biodegradation

**Product:** No data available.

#### Specified substance(s)

potassium silicate No data available.  
Potassium hydroxide No data available.

#### BOD/COD Ratio

**Product** No data available.

#### Specified substance(s)

potassium silicate No data available.  
Potassium hydroxide No data available.

### 12.3 Bioaccumulative potential

**Product:** No data available.

#### Specified substance(s)

potassium silicate No data available.  
Potassium hydroxide No data available.

### 12.4 Mobility in soil:

No data available.

#### Known or predicted distribution to environmental compartments

potassium silicate No data available.  
Potassium hydroxide No data available.

### 12.5 Results of PBT and vPvB assessment:

Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria Not fulfilling vPvB (very persistent/very bioaccumulative) criteria  
potassium silicate No data available.  
Potassium hydroxide No data available.

**12.6 Other adverse effects:** No data available.

**12.7 Additional Information:** No data available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### General information:

Disposal considerations (including disposal of contaminated containers or packaging) Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Disposal methods:**

Environmental regulations, discharge of chemicals and wastewater, waste treatment and disposal conditions of chemicals and their packaging may vary from one country to another. The relevant local regulations should be consulted. When this product or its contaminated packaging has to be removed as waste, contact an authorized waste contractor. May be discharged to drain if local regulations permit.

As the packaging can be contaminated with product residus, please observe the warnings of the label even when the container is empty. Do not reuse empty container without proper cleaning. Label precautions also apply to this container when empty.

**SECTION 14: Transport information****ADR**

14.1 UN Number:	Not regulated.
14.2 UN Proper Shipping Name:	Not regulated.
14.3 Transport Hazard Class(es)	Not regulated.
14.4 Packing Group:	Not regulated.
14.5 Environmental Hazards:	Not regulated.
14.6 Special precautions for user:	Not regulated.

**RID**

14.1 UN Number:	Not regulated.
14.2 UN Proper Shipping Name:	Not regulated.
14.3 Transport Hazard Class(es)	Not regulated.
14.4 Packing Group:	Not regulated.
14.5 Environmental Hazards:	Not regulated.
14.6 Special precautions for user:	Not regulated.

**IMDG**

14.1 UN Number:	Not regulated.
14.2 UN Proper Shipping Name:	Not regulated.
14.3 Transport Hazard Class(es)	Not regulated.
14.4 Packing Group:	Not regulated.
14.5 Environmental Hazards:	Not regulated.
14.6 Special precautions for user:	Not regulated.

**IATA**

14.1 UN Number:	Not regulated.
14.2 UN Proper Shipping Name:	Not regulated.
14.3 Transport Hazard Class(es)	Not regulated.
14.4 Packing Group:	Not regulated.
14.5 Environmental Hazards:	Not regulated.
14.6 Special precautions for user:	Not regulated.

**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code:** not applicable.

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:****EU Regulations**

**Regulation (EC) No. 2037/2000 Substances that deplete the ozone layer:** none

**Regulation (EC) No. 850/2004 on persistent organic pollutants:** none

**Regulation (EC) No. 689/2008 Import and export of dangerous chemicals:** none

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended:** none

**Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use:** none

**Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work.:** none

**Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breast feeding.:** none

**Directive 96/82/EC (Seveso III): on the control of major accident hazards involving dangerous substances:** none

**EU. Regulation No. 166/2006 PRTR (Pollutant Release and Transfer Registry), Annex II: Pollutants:** none

**Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work:**

Chemical name	CAS-No.	Concentration
Potassium hydroxide	1310-58-3	1.0 - 10%

#### 15.2 Chemical safety assessment:

No Chemical Safety Assessment has been carried out.

### SECTION 16: Other information

**Revision Information:** Not relevant.

#### References

PBT PBT: persistent, bioaccumulative and toxic substance.  
vPvB vPvB: very persistent and very bioaccumulative substance.

**Key literature references and sources for data:** Safety Data Sheet from the supplier.  
ECHA

#### Wording of the H-statements in section 2 and 3

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

**Training information:** No data available.

#### Classification according to Regulation (EC) No 1272/2008 as amended.

Skin Irrit. 2, H315

Eye Dam. 1, H318

**Issue Date:** 28.03.2017

**SDS No.:**

**Disclaimer:** This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.