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: ARKANA DEVELOPER **Product No.:** 000001014667

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

Identified uses: Photographic 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.

Physical Hazards		
Corrosive to metals	Category 1	H290: May be corrosive to metals.
Health Hazards		
Skin corrosion	Category 1A	H314: Causes severe skin burns and eye damage.
Serious eye damage	Category 1	H318: Causes serious eye damage.

2.2 Label Elements

Contains: sodium hydroxide

Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate

Signal Word: Danger

Hazard Statement(s): H314: Causes severe skin burns and eye damage.
H290: May be corrosive to metals.

Precautionary Statements

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

Response: P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor/…
P330: Rinse mouth.
P331: Do NOT induce vomiting.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
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.
P390: Absorb spillage to prevent material damage.

2.3 Other hazards Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria Not fulfilling vPvB (very persistent/very bioaccummulative) 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
Sodium octanoate	1 - <5%	1984-06-1	217-850-5	No data available.	No data available.	
sodium hydroxide	2 - <3%	1310-73-2	215-185-5	01-2119457892-27-XXXX	No data available.	#
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	1 - <2.5%	73038-25-2		No data available.	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
Sodium octanoate	Eye Irrit.: 2: H319 Skin Irrit.: 2: H315 STOT SE: 3: H335	

sodium hydroxide	Skin Corr.: 1A: H314	No data available.
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	Skin Irrit.: 2: H315 Eye Dam.: 1: H318 Aquatic Chronic: 2: H411	

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

CLP: Regulation No. 1272/2008.

SECTION 4: First aid measures

General: Get medical attention if symptoms occur. CAUTION! First aid personnel must be aware of own risk during rescue!

4.1 Description of first aid measures

Inhalation: Call a physician or poison control center immediately. If breathing stops, provide artificial respiration. Move to fresh air. If breathing is difficult, give oxygen.

Skin Contact: Remove contaminated clothing and wash the skin thoroughly with soap and water after work. Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash contaminated clothing before reuse.

Eye contact: 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.

Ingestion: Call a physician or poison control center immediately. Rinse mouth. Never give liquid to an unconscious person. Do not induce vomiting without advice from poison control center.

4.2 Most important symptoms and effects, both acute and delayed: See section 11 of the SDS for additional information on health hazards.

4.3 Indication of any immediate medical attention and special treatment needed

Hazards: See section 11 of the SDS for additional information on health hazards.

Treatment: Get medical attention if symptoms occur.

SECTION 5: Firefighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

5.1 Extinguishing media

Suitable extinguishing media: Extinguish with foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

5.2 Special hazards arising from the substance or mixture: During fire, gases hazardous to health may be formed.

5.3 Advice for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

6.2 Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

6.3 Methods and material for containment and cleaning up: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Dike far ahead of larger spill for later recovery and disposal.

6.4 Reference to other sections: 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: Do not get in eyes. Wash hands thoroughly after handling. Do not get in eyes, on skin, on clothing.

7.2 Conditions for safe storage, including any incompatibilities: Store in a corrosion-resistant/ container with a resistant inner liner. Store locked up.

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

DNEL-Values

Critical component	Type	Route of Exposure	Health Warnings	Remarks
sodium 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.

8.2 Exposure controls

Appropriate Engineering Controls: Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

General information:	Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Follow training instructions when handling this material.
Eye/face protection:	Safety goggles. EN 166.
Skin protection	
Hand Protection:	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.
Other:	Safety clothes : long sleeved clothing EN13688
Respiratory Protection:	In case of inadequate ventilation use suitable respirator (EN14387). Seek advice from local supervisor.
Hygiene measures:	Do not get in eyes. Observe good industrial hygiene practices. Wash contaminated clothing before reuse. Do not get this material in contact with skin. Wash hands before breaks and immediately after handling the product.
Environmental Controls:	Do not empty into drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	
Physical state:	liquid
Form:	No data available.
Color:	No data available.
Odor:	No data available.
Odor Threshold:	No data available.
pH:	13.0
Freezing point:	No data available.
Boiling Point:	> 100 °C
Flash Point:	> 93.33 °C Not combustible.
Evaporation Rate:	No data available.
Flammability (solid, gas):	Noncombustible Liquid
Flammability Limit - Upper (%):	No data available.
Flammability Limit - Lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density (air=1):	No data available.
Density:	No data available.
Relative density:	1.037
Solubility(ies)	
Solubility in Water:	No data available.
Solubility (other):	No data available.

Partition coefficient (n-octanol/water):	No data available.
Autoignition Temperature:	not applicable
Decomposition Temperature:	No data available.
SADT:	No data available.
Viscosity:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.

9.2 Other information

VOC Content: EC Directive 1999/13: 0 g/l ~0 % (calculated)
EC Directive 2004/42: 23 g/l ~2.3 % (calculated)

SECTION 10: Stability and reactivity

10.1 Reactivity: Material is stable under normal conditions.

10.2 Chemical Stability: Material is stable under normal conditions.

10.3 Possibility of hazardous reactions: Not known.

10.4 Conditions to avoid: Avoid heat or contamination.

10.5 Incompatible Materials: Reacts violently with strong acids.

10.6 Hazardous Decomposition Products: By heating and fire, harmful vapors/gases may be formed.

SECTION 11: Toxicological information

General information: Skin: Corrosive, redness and pain, burns, blisters. Eyes: Corrosive, lacrimation, impaired vision, severe burns.

Information on likely routes of exposure

Inhalation: Inhalation is the primary route of exposure. In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.

Skin Contact: Causes severe skin burns.

Eye contact: Causes serious eye damage.

Ingestion: May be ingested by accident. Ingestion may cause irritation and malaise.

11.1 Information on toxicological effects

Acute toxicity

Oral

Product: Not classified for acute toxicity based on available data.

Specified substance(s)

Sodium octanoate	No data available.
sodium hydroxide	No data available.
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	No data available.

Dermal

Product:	Not classified for acute toxicity based on available data.
Specified substance(s)	
Sodium octanoate	No data available.
sodium hydroxide	No data available.
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	No data available.

Inhalation

Product:	Not classified for acute toxicity based on available data.
Specified substance(s)	
Sodium octanoate	No data available.
sodium hydroxide	No data available.
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	No data available.

Repeated dose toxicity

Product:	No data available.
Specified substance(s)	
Sodium octanoate	No data available.
sodium hydroxide	No data available.
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	No data available.

Skin Corrosion/Irritation:

Product:	No data available.
Specified substance(s)	
Sodium octanoate	No data available.
sodium hydroxide	No data available.
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	No data available.

Serious Eye Damage/Eye Irritation:

Product:	No data available.
Specified substance(s)	
Sodium octanoate	No data available.
sodium hydroxide	Corrosive
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	No data available.

Respiratory or Skin Sensitization:

Product:	No data available.
Specified substance(s)	
Sodium octanoate	No data available.
sodium hydroxide	No data available.
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	No data available.

Germ Cell Mutagenicity

In vitro

Product:	No data available.

Specified substance(s)

Sodium octanoate	No data available.
sodium hydroxide	No data available.
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	No data available.

In vivo

Product:	No data available.

Specified substance(s)

Sodium octanoate	No data available.
sodium hydroxide	No data available.
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	No data available.

Carcinogenicity

Product:	No data available.

Specified substance(s)

Sodium octanoate	No data available.
sodium hydroxide	No data available.
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	No data available.

Reproductive toxicity

Product:	No data available.

Specified substance(s)

Sodium octanoate	No data available.
sodium hydroxide	No data available.
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	No data available.

Specific Target Organ Toxicity - Single Exposure

Product:	No data available.

Specified substance(s)

Sodium octanoate	No data available.
sodium hydroxide	No data available.
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product:	No data available.

Specified substance(s)

Sodium octanoate	No data available.
sodium hydroxide	No data available.

Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	No data available.

Aspiration Hazard

Product: No data available.

Specified substance(s)

Sodium octanoate	No data available.
sodium hydroxide	No data available.
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	No data available.

SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

Fish

Product: No data available.

Specified substance(s)

Sodium octanoate	No data available.
sodium hydroxide	LC 50 (Leuciscus idus, 48 h): 189 mg/l experimental result
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	LC 50 (Zebra danio (Danio rerio), 96 h): 10 - 100 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

Sodium octanoate	No data available.
sodium hydroxide	LC 50 (48 h): 30 - 100 mg/l experimental result
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	No data available.

Chronic Toxicity

Fish

Product: No data available.

Specified substance(s)

Sodium octanoate	No data available.
sodium hydroxide	No data available.
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	No data available.

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

Sodium octanoate	No data available.
sodium hydroxide	No data available.
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-,	No data available.

phosphate

Toxicity to Aquatic Plants

Product:	No data available.

Specified substance(s)

Sodium octanoate	No data available.
sodium hydroxide	No data available.
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	No data available.

12.2 Persistence and Degradability

Biodegradation

Product:	No data available.

Specified substance(s)

Sodium octanoate	No data available.
sodium hydroxide	No data available.
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	No data available.

BOD/COD Ratio

Product	No data available.

Specified substance(s)

Sodium octanoate	No data available.
sodium hydroxide	No data available.
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	No data available.

12.3 Bioaccumulative potential

Product:	No data available.

Specified substance(s)

Sodium octanoate	No data available.
sodium hydroxide	No data available.
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	No data available.

12.4 Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Sodium octanoate	No data available.
sodium hydroxide	No data available.
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	No data available.

12.5 Results of PBT and vPvB assessment: Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria Not fulfilling vPvB (very persistent/very bioaccummulative) criteria

Sodium octanoate	No data available.
sodium hydroxide	No data available.
Poly(oxy-1,2-ethanediyl), α-isotridecyl-ω-hydroxy-, phosphate	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: Discharge, treatment, or disposal may be subject to national, state, or local laws.

Since emptied containers retain product residue, follow label warnings even after container is emptied.

SECTION 14: Transport information

ADR

14.1 UN Number:	UN 1824
14.2 UN Proper Shipping Name:	SODIUM HYDROXIDE SOLUTION
14.3 Transport Hazard Class(es)	
Class:	8
Label(s):	8
Hazard No. (ADR):	80
Tunnel restriction code:	(E)
14.4 Packing Group:	II
Limited quantity	1.00L
Excepted quantity	E2
14.5 Environmental Hazards:	No
14.6 Special precautions for user:	–

RID

14.1 UN Number:	UN 1824
14.2 UN Proper Shipping Name	SODIUM HYDROXIDE SOLUTION
14.3 Transport Hazard Class(es)	
Class:	8
Label(s):	8
14.4 Packing Group:	II
14.5 Environmental Hazards:	No
14.6 Special precautions for user:	–

IMDG

14.1 UN Number:	UN 1824
14.2 UN Proper Shipping Name:	SODIUM HYDROXIDE SOLUTION
14.3 Transport Hazard Class(es)	
Class:	8
Label(s):	8
EmS No.:	F-A, S-B
14.4 Packing Group:	II
Limited quantity	1.00L

Excepted quantity	E2
14.5 Environmental Hazards:	Not regulated.
14.6 Special precautions for user:	–

IATA

14.1 UN Number:	UN 1824
14.2 Proper Shipping Name:	Sodium hydroxide solution
14.3 Transport Hazard Class(es):	
Class:	8
Label(s):	8
14.4 Packing Group:	II
Limited quantity	0.50L
Excepted quantity	E2
14.5 Environmental Hazards:	No
14.6 Special precautions for user:	–
Other information	
Passenger and cargo aircraft:	Allowed.
Cargo aircraft only:	Allowed.

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

EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC): 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
sodium hydroxide	1310-73-2	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

H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H411	Toxic to aquatic life with long lasting effects.

Training information: No data available.

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

Met. Corr. 1, H290	calculated
Skin Corr. 1A, H314	calculated
Eye Dam. 1, H318	calculated

Issue Date: 07.08.2017
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.