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: EN232 **Product No.:** 000001015661

Synonyms, Trade Names: Superdot HN100
DEVELOPER

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

Serious eye irritation	Category 2	H319: Causes serious eye irritation.

2.2 Label Elements

Signal Words: Warning

Hazard Statement(s): H319: Causes serious eye irritation.

Precautionary Statement Response: P337+P313: If eye irritation persists: Get medical advice/attention.

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.	
2-phenoxyethanol	1 - <5%	122-99-6	204-589-7	01-2119488943-21-XXXX	No data available.	
dodecylbenzenesulphonic acid sodium salt	1 - <3%	68411-30-3	270-115-0	01-2119489428-22-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).
PBT: persistent, bioaccumulative and toxic substance.
vPvB: very persistent and very bioaccumulative substance.

Classification

Chemical name	Classification	Notes
sodium octanoate	Eye Irrit.: 2: H319 Skin Irrit.: 2: H315 STOT SE: 3: H335	
2-phenoxyethanol	Eye Irrit.: 2: H319 Acute Tox.: 4: H302	No data available.
dodecylbenzenesulphonic	Acute Tox.: 4: H302 Skin Irrit.: 2: H315 Eye Dam.: 1: H318	

acid sodium salt		

CLP: Regulation No. 1272/2008.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: Move to fresh air.

Eye contact: Rinse immediately with plenty of water.

Skin Contact: Remove contaminated clothing and wash the skin thoroughly with soap and water after work.

Ingestion: Rinse mouth thoroughly.

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: No data available.

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: Use personal protective equipment. Put on protective equipment before entering danger area.

6.2 Environmental Precautions: 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.

6.3 Methods and material for containment and cleaning up: Stop the flow of material, if this is without risk. Absorb with sand or other inert absorbent.

6.4 Reference to other sections: For personal protection see section 8. 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

None of the components have assigned exposure limits.

Biological Limit Values

None.

DNEL-Values

Critical component	type	Route of Exposure		Remarks
2-phenoxyethanol	General population	Dermal	20.83 mg/kg	Repeated dose toxicity
	Worker: Industry	Inhalation	8.07 mg/m3	
	General population	Oral	0.8 mg/kg	Repeated dose toxicity
	Worker: Industry	Inhalation	8.07 mg/m3	
	General population	Inhalation	1.92 mg/m3	Repeated dose toxicity
	Worker: Industry	Dermal	34.72 mg/kg	
	General population	Dermal	8.33 mg/kg	Repeated dose toxicity
	General population	Oral	17.43 mg/kg	Repeated dose toxicity
	Workers	Inhalation	8.07 mg/m3	Repeated dose toxicity
	Workers	Dermal	16.66 mg/kg	Repeated dose toxicity
	General population	Inhalation	2.41 mg/m3	Repeated dose toxicity
	General population	Inhalation	2.41 mg/m3	Repeated dose toxicity
	General population	Oral	2.7 mg/kg	Acute toxicity
	Workers	Inhalation	3.84 mg/m3	Repeated dose toxicity
	Workers	Inhalation	8.07 mg/m3	Repeated dose toxicity
	General population	Oral	17.43 mg/kg	Repeated dose toxicity
	Workers	Dermal	34.72 mg/kg	Repeated dose toxicity

dodecylbenzenesulphonic acid sodium salt	General population	Oral	0.85 mg/kg	Repeated dose toxicity
	General population	Inhalation	3 mg/m3	Repeated dose toxicity
	General population	Dermal	85 mg/kg	Repeated dose toxicity
	General population	Inhalation	3 mg/m3	Repeated dose toxicity
	Workers	Inhalation	12 mg/m3	Repeated dose toxicity
	Workers	Dermal	170 mg/kg	Repeated dose toxicity
	Workers	Inhalation	12 mg/m3	Repeated dose toxicity
trometamol	Workers	Dermal	166.7 mg/kg	Repeated dose toxicity
	General population	Inhalation	29 mg/m3	Repeated dose toxicity
	General population	Dermal	83.3 mg/kg	Repeated dose toxicity
	General population	Oral	8.3 mg/kg	Repeated dose toxicity
	Workers	Inhalation	117.5 mg/m3	Repeated dose toxicity
Sodium dihydrogenphosphate	Workers	Inhalation	4.07 mg/m3	Repeated dose toxicity
	General population	Inhalation	3.04 mg/m3	Repeated dose toxicity

PNEC-Values

Critical component	Environmental compartment		Remarks
2-phenoxyethanol	Sewage treatment plant	24.8 mg/l	
	Fresh water	0.943 mg/l	
	Aquatic (marine water)	0.0943 mg/l	
	Marine water	0.0943 mg/l	
	Marine sediments	0.7237 mg/kg	
	Intermittent release	3.44 mg/l	
	Aquatic (intermit. releases)	3.44 mg/l	
	Sewage treatment plant	24.8 mg/l	
	freshwater sediment	7.2366 mg/kg	
	Sediment-fresh water	7.2366 mg/kg	
	Aquatic (freshwater)	0.943 mg/l	
	Soil	1.26 mg/kg	
	soil	1.26 mg/kg	
dodecylbenzenesulphonic acid sodium salt	Sewage treatment plant	3.43 mg/l	
	Marine sediments	8.1 mg/kg	
	Aquatic (intermit. releases)	0.0167 mg/l	
	freshwater sediment	8.1 mg/kg	
	Aquatic (freshwater)	0.268 mg/l	
	Aquatic (marine water)	0.0268 mg/l	
	soil	35 mg/kg	
trometamol	Aquatic (freshwater)	0.08 mg/l	
	soil	0.1303 mg/kg	
	Marine sediments	0.0886 mg/kg	
	Sewage treatment plant	300 mg/l	
	freshwater sediment	0.8858 mg/kg	

	Aquatic (intermit. releases)	3.97 mg/l	
	Aquatic (marine water)	0.008 mg/l	
Sodium dihydrogenphosphate	Aquatic (marine water)	0.005 mg/l	
	Sewage treatment plant	50 mg/l	
	Aquatic (freshwater)	0.05 mg/l	
	Aquatic (intermit. releases)	0.5 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

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: 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.

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:	liquid
Color:	Colorless
Odor:	Nearly odorless
Odor Threshold:	No data available.
pH:	9.0 (25 °C)
Freezing point:	< 0 °C (Literature.)
Boiling Point:	> 100 °C (Literature.)
Flash Point:	> 100 °C (Literature.)
Evaporation Rate:	Almost no evaporation (20°C).
Flammability (solid, gas):	Not flammable.
Flammability Limit - Upper (%):	No data available.
Flammability Limit - Lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density (air=1):	No data available.
Relative density:	1.0350 (20 °C) (Literature.)
Solubility(ies)	
Solubility in Water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Autoignition Temperature:	No data available.
Decomposition Temperature:	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 2004/42: 9 g/l ~0.9 % (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:	Material is stable under normal conditions.
10.4 Conditions to avoid:	Strong acids. Avoid heat or contamination.
10.5 Incompatible Materials:	Strong acids.
10.6 Hazardous Decomposition Products:	No specified dangerous decomposition products are known. By heating and fire, harmful vapors/gases may be formed.

SECTION 11: Toxicological information

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.
Ingestion:	May be ingested by accident. Ingestion may cause irritation and malaise.
Skin Contact:	Moderately irritating to skin with prolonged exposure.
Eye contact:	Eye contact is possible and should be avoided.

11.1 Information on toxicological effects

Acute toxicity

Oral

Product:	ATEmix: 12,480.5 mg/kg

Specified substance(s)

sodium octanoate	No data available.
2-phenoxyethanol	LD50 (rat): 1,850 mg/kg
dodecylbenzenesulphonic acid sodium salt	LD 50 (Rat): 1,600 mg/kg

Dermal

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

Specified substance(s)

sodium octanoate	No data available.
2-phenoxyethanol	LD50 (rat): > 2,214 mg/kg
dodecylbenzenesulphonic acid sodium salt	LD 50 (Rat): > 2,000 mg/kg

Inhalation

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

Specified substance(s)

sodium octanoate	No data available.
2-phenoxyethanol	LC 50 (Rat): > 1,000 mg/m3 LC50 (rat): > 1 mg/l
dodecylbenzenesulphonic acid sodium salt	No data available.

Repeated dose toxicity

Product:	No data available.

Specified substance(s)

sodium octanoate	No data available.
2-phenoxyethanol	

dodecylbenzenesulphonic acid sodium salt	NOAEL (Rat(Female, Male), Oral, 4 Weeks): 200 mg/kg LOAEL (Rat(Female, Male), Oral, 13 Weeks): 400 mg/kg LOAEL (Rabbit(Female), Oral, 10 d): 100 mg/kg NOAEL (Rat(Female, Male), Oral, 13 Weeks): 80 mg/kg NOAEL (Rat(Female, Male), Oral, 9 Months): 85 mg/kg NOAEL (Rat(Female, Male), Oral, 6 Months): 40 mg/kg LOAEL (Rat(Female, Male), Oral, 1 Months): 250 mg/kg LOAEL (Rat(Female, Male), Oral, 9 Months): 145 mg/kg LOAEL (Rat(Female, Male), Oral, 6 Months): 115 mg/kg

Skin Corrosion/Irritation:

Product:	No data available.
Specified substance(s)	
sodium octanoate	No data available.
2-phenoxyethanol	OECD Test Guideline 404 (rabbit): No skin irritation No skin irritation Based on available data, the classification criteria are not met.
dodecylbenzenesulphonic acid sodium salt	in vivo (Rabbit): Category 2

Serious Eye Damage/Eye Irritation:

Product:	No data available.
Specified substance(s)	
sodium octanoate	No data available.
2-phenoxyethanol	OECD Test Guideline 405 (rabbit): Eye irritation Irritating to eyes.
dodecylbenzenesulphonic acid sodium salt	in vivo (Rabbit, 24 - 72 hrs): Category 1 EU

Respiratory or Skin Sensitization:

Product:	No data available.
Specified substance(s)	
sodium octanoate	No data available.
2-phenoxyethanol	, OECD Test Guideline 406 (guinea pig)Did not cause sensitization on laboratory animals. Based on available data, the classification criteria are not met.
dodecylbenzenesulphonic acid sodium salt	No data available.

Germ Cell Mutagenicity

In vitro

Product:	No data available.
Specified substance(s)	
sodium octanoate	No data available.
2-phenoxyethanol	(OECD Test Guideline 476.)negative

dodecylbenzenesulphonic acid sodium salt	No data available.

In vivo

Product:	No data available.

Specified substance(s)

sodium octanoate	No data available.
2-phenoxyethanol	(Information taken from Reach Registration (ECHA).)negative
dodecylbenzenesulphonic acid sodium salt	No data available.

Carcinogenicity

Product:	No data available.

Specified substance(s)

sodium octanoate	No data available.
2-phenoxyethanol	No data available
dodecylbenzenesulphonic acid sodium salt	No data available.

Reproductive toxicity

Product:	No data available.

Specified substance(s)

sodium octanoate	No data available.
2-phenoxyethanol	No data available
dodecylbenzenesulphonic acid sodium salt	No data available.

Specific Target Organ Toxicity - Single Exposure

Product:	No data available.

Specified substance(s)

sodium octanoate	No data available.
2-phenoxyethanol	Central nervous systemMay cause impairment of central nervous system. May cause drowsiness and dizziness.
dodecylbenzenesulphonic acid sodium salt	No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product:	No data available.

Specified substance(s)

sodium octanoate	No data available.
2-phenoxyethanol	Blood, Liver, KidneyMay cause damage to organs through prolonged or repeated exposure.
dodecylbenzenesulphonic acid sodium salt	No data available.

Aspiration Hazard

Product:	No data available.

Specified substance(s)

sodium octanoate	No data available.
2-phenoxyethanol	No data available
dodecylbenzenesulphonic acid sodium salt	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.
2-phenoxyethanol	LC50 (Pimephales promelas (fathead minnow), 96 h): 344 mg/l (Literature.) Based on available data, the classification criteria are not met.
dodecylbenzenesulphonic acid sodium salt	LC 50 (Lepomis macrochirus, 96 h): 1.67 mg/l (Static) experimental result

Aquatic Invertebrates

Product:	No data available.

Specified substance(s)

sodium octanoate	No data available.
2-phenoxyethanol	LC 50 (24 h): 1,606 mg/l experimental result EC50 (Daphnia magna (water flea), 48 h): > 500 mg/l (OECD Test Guideline 202) Based on available data, the classification criteria are not met.
dodecylbenzenesulphonic acid sodium salt	EC 50 (24 h): 6.4 mg/l (Static) experimental result

Chronic Toxicity

Fish

Product:	No data available.

Specified substance(s)

sodium octanoate	No data available.
2-phenoxyethanol	No data available.
dodecylbenzenesulphonic acid sodium salt	NOAEL (Oreochromis mossambicus, 90 d): 0.25 mg/l (static, open-system) experimental result NOAEL (Lepomis macrochirus, 28 d): 1 mg/l (flow-through) experimental result

	NOAEL (Oncorhynchus mykiss, 72 d): 0.23 mg/l (flow-through) experimental result NOAEL (Pimephales promelas, 196 d): 0.63 mg/l (open system) experimental result LOAEL (Poecilia reticulata, 28 d): 10 mg/l (semi-static) experimental result

Aquatic Invertebrates

Product:	No data available.

Specified substance(s)

sodium octanoate	No data available.
2-phenoxyethanol	No data available.
dodecylbenzenesulphonic acid sodium salt	No data available.

Toxicity to Aquatic Plants

Product:	No data available.

Specified substance(s)

sodium octanoate	No data available.
2-phenoxyethanol	EC50 (Scenedesmus subspicatus (algae), 72 h): > 500 mg/l (DIN 38412) Based on available data, the classification criteria are not met.
dodecylbenzenesulphonic acid sodium salt	No data available.

12.2 Persistence and Degradability

Biodegradation

Product:	No data available.

Specified substance(s)

sodium octanoate	No data available.
2-phenoxyethanol	No data available.
dodecylbenzenesulphonic acid sodium salt	No data available.

BOD/COD Ratio

Product	No data available.

Specified substance(s)

sodium octanoate	No data available.
2-phenoxyethanol	No data available.
dodecylbenzenesulphonic acid sodium salt	No data available.

12.3 Bioaccumulative Potential

Product:	No data available.

Specified substance(s)

sodium octanoate	No data available.
2-phenoxyethanol	Accumulation in aquatic organisms is unlikely.

dodecylbenzenesulphonic acid sodium salt	No data available.

12.4 Mobility in Soil: No data available.

Known or predicted distribution to environmental compartments

sodium octanoate	No data available.
2-phenoxyethanol	No data available
dodecylbenzenesulphonic acid sodium salt	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.
2-phenoxyethanol	No data available.
dodecylbenzenesulphonic acid sodium salt	No data available.

12.6 Other Adverse Effects: 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: Wash before disposal. Dispose to controlled facilities.

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 MARPOL73/78 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 II): 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: none

15.2 Chemical safety No Chemical Safety Assessment has been carried out.

assessment:

SECTION 16: Other information

Revision Information: Not relevant.Not relevant.

Key literature references and sources for data: No data available.

Wording of the H-statements in section 2 and 3

H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Training information: No data available.

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

Eye Irrit. 2, H319

Issue Date: 22.06.2016
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.