

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: ASD, PART A

Product No.: 000001016780

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

Identified uses: photochemicals

Uses advised against: Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Manufacturer

Agfa Graphics NV
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2640 Mortsel
Belgium

Telephone: +32 3 4442111

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E-mail: electronic.sds@agfa.com

National Supplier

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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.

Specific Target Organ Toxicity -
Single Exposure

Category 3

H335: May cause respiratory irritation.

2.2 Label Elements

Contains: Potassium carbonate
sodium hydroxide
EDTA-tetrasodium salt



Signal Word: Danger

Hazard Statement(s): H314: Causes severe skin burns and eye damage.
H335: May cause respiratory irritation.
H290: May be corrosive to metals.

Precautionary Statements

Prevention: P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
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/...
P304+P312: IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
P340: Remove person to fresh air and keep comfortable for breathing.
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 carbonate	20 - <50%	584-08-7	209-529-3	01-2119532646-36	No data available.	
sodium hydroxide	3 - <5%	1310-73-2	215-185-5	01-2119457892-27-XXXX	No data available.	#
EDTA-tetrasodium salt	1 - <3%	64-02-8	200-573-9	01-2119486762-27	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 carbonate	Eye Irrit.: 2: H319 Skin Irrit.: 2: H315 STOT SE: 3: H335	
sodium hydroxide	Skin Corr.: 1A: H314	No data available.
EDTA-tetrasodium salt	Acute Tox.: 4: H302 Eye Dam.: 1: H318	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

Inhalation: Move to fresh air.

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

Eye contact: Rinse immediately with plenty of water.

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: 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:** 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:** 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 in a corrosion-resistant/ container with a resistant inner liner.
- 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/m ³	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)

DNEL-Values

Critical component	Type	Route of Exposure	Health Warnings	Remarks
Potassium carbonate	General population	Inhalation	Local, long-term; 10 mg/m ³	Irritating to respiratory system.
	Workers	Dermal	Local, long-term; 16 mg/cm ²	Skin irritation/corrosion
	General population	Dermal	Local, long-term; 8 mg/cm ²	Skin irritation/corrosion
	Workers	Inhalation	Local, long-term; 10 mg/m ³	Irritating to respiratory system.
Sodium sulphite	General population	Oral	Systemic, long-term; 11 mg/kg	Repeated dose toxicity
	General population	Inhalation	Systemic, long-term; 88 mg/m ³	Repeated dose toxicity
	Workers	Inhalation	Systemic, long-term; 298 mg/m ³	Repeated dose toxicity
	Workers	Inhalation	Local, long-term; 1 mg/m ³	Irritating to respiratory system.
sodium hydroxide	General population	Inhalation	Local, long-term; 1 mg/m ³	Irritating to respiratory system.
	General population	Oral	Systemic, long-term; 25 mg/kg	Repeated dose toxicity

	Workers	Inhalation	Local, short-term; 2.5 mg/m ³	Repeated dose toxicity
	General population	Inhalation	Systemic, short-term; 1.5 mg/m ³	Repeated dose toxicity
	General population	Inhalation	Local, short-term; 1.5 mg/m ³	Repeated dose toxicity
	Workers	Inhalation	Systemic, short-term; 2.5 mg/m ³	Repeated dose toxicity
glycerine	Workers	Inhalation	Local, long-term; 56 mg/m ³	Irritating to respiratory system.
	General population	Oral	Systemic, long-term; 229 mg/kg	Repeated dose toxicity
	General population	Inhalation	Local, long-term; 33 mg/m ³	Irritating to respiratory system.
Methyl-1H-benzotriazole	General population	Oral	Systemic, short-term; 0.25 mg/kg	Repeated dose toxicity
	Workers	Dermal	Systemic, long-term; 0.5 mg/kg	Repeated dose toxicity
	General population	Oral	Systemic, long-term; 0.25 mg/kg	Repeated dose toxicity
	General population	Dermal	Systemic, long-term; 0.25 mg/kg	Repeated dose toxicity
	Workers	Inhalation	Systemic, long-term; 8.8 mg/m ³	Repeated dose toxicity
	General population	Inhalation	Systemic, long-term; 4.4 mg/m ³	Repeated dose toxicity

PNEC-Values

Critical component	Environmental compartment	PNEC-Values
Sodium sulphite	Aquatic (marine water)	0.13 mg/l
	Aquatic (freshwater)	1.33 mg/l
	Sewage treatment plant	99.9 mg/l
EDTA-tetrasodium salt	soil	0.72 mg/kg
	Aquatic (marine water)	0.22 mg/l
	Aquatic (freshwater)	2.2 mg/l
	Aquatic (intermit. releases)	1.2 mg/l
	Sewage treatment plant	43 mg/l
glycerine	Aquatic (marine water)	0.0885 mg/l
	Marine sediments	0.33 mg/kg
	Aquatic (freshwater)	0.885 mg/l
	Sewage treatment plant	1000 mg/l
	freshwater sediment	3.3 mg/kg
	soil	0.141 mg/kg
Methyl-1H-benzotriazole	Aquatic (intermit. releases)	8.85 mg/l
	Sewage treatment plant	39.4 mg/l
	Marine sediments	0.0025 mg/kg
	Aquatic (freshwater)	0.008 mg/l
	Aquatic (intermit. releases)	0.086 mg/l
	Aquatic (marine water)	0.008 mg/l
	soil	0.0024 mg/kg
freshwater sediment	0.0025 mg/kg	

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:	solid
Form:	Powder form.
Color:	White to yellowish
Odor:	Odourless.
Odor Threshold:	No data available.
pH:	13.0 (25 °C)
Melting Point:	No data available.
Boiling Point:	> 100 °C (Literature.)
Flash Point:	not applicable
Evaporation Rate:	No data available.
Flammability (solid, gas):	Product is not combustible.
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:	No data available.
Solubility(ies)	
Solubility in Water:	soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Autoignition Temperature:	No data available.
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: 0 g/l ~0 % (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:** None known.
- 10.6 Hazardous Decomposition Products:** 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.
- Skin Contact:** Moderately irritating to skin with prolonged exposure.
- Eye contact:** Eye contact is possible and should be avoided.
- Ingestion:** May be ingested by accident. Ingestion may cause irritation and malaise.

11.1 Information on toxicological effects

Acute toxicity

Oral

- Product:** ATEmix: 74,166.67 mg/kg
- Specified substance(s)**
 - Potassium carbonate LD 50 (Rat): > 2,000 mg/kg Experimental result, Key study
 - sodium hydroxide No data available.
 - EDTA-tetrasodium salt LD 50 (Rat): 1,780 mg/kg Experimental result, Key study

Dermal

- Product:** Not classified for acute toxicity based on available data.
- Specified substance(s)**
 - Potassium carbonate LD 50 (Rabbit) : > 2,000 mg/kg
 - sodium hydroxide No data available.
 - EDTA-tetrasodium salt No data available.

Inhalation

- Product:** Not classified for acute toxicity based on available data.
- Specified substance(s)**
 - Potassium carbonate LC 50 (Rat, 4.5 h): > 4.96 mg/l Dust, Experimental result, Key study

sodium hydroxide
 EDTA-tetrasodium salt No data available.
 LOAEL (Rat): 30 mg/m³ Aerosol, Read-across from supporting
 substance (structural analogue or surrogate), Key study

Repeated dose toxicity

Product: No data available.
Specified substance(s)
 Potassium carbonate NOAEL (Rat(Male), Oral, 130 Weeks): 2,667 mg/kg
 NOAEL (Rat(Female), Oral, 130 Weeks): 3,331 mg/kg
 NOAEL (Rat(Female, Male), Inhalation): 0.4 mg/l
 sodium hydroxide No data available.
 EDTA-tetrasodium salt LOAEL (Rat(Male), Inhalation, 1 - 5 d): 30 mg/m³
 NOAEL (Rat(Female, Male), Oral, 103 Weeks): >= 500 mg/kg

Skin Corrosion/Irritation:

Product: No data available.
Specified substance(s)
 Potassium carbonate No data available.
 sodium hydroxide No data available.
 EDTA-tetrasodium salt No data available.

Serious Eye Damage/Eye Irritation:

Product: No data available.
Specified substance(s)
 Potassium carbonate Irritating
 sodium hydroxide Corrosive
 EDTA-tetrasodium salt in vivo (Rabbit, 24 - 72 hrs): Category 1

Respiratory or Skin Sensitization:

Product: No data available.
Specified substance(s)
 Potassium carbonate No data available.
 sodium hydroxide No data available.
 EDTA-tetrasodium salt No data available.

Germ Cell Mutagenicity

In vitro

Product: No data available.
Specified substance(s)
 Potassium carbonate No data available.
 sodium hydroxide No data available.
 EDTA-tetrasodium salt No data available.

In vivo

Product: No data available.
Specified substance(s)
 Potassium carbonate No data available.
 sodium hydroxide No data available.
 EDTA-tetrasodium salt No data available.

Carcinogenicity

Product: No data available.

Specified substance(s)

Potassium carbonate No data available.
 sodium hydroxide No data available.
 EDTA-tetrasodium salt No data available.

Reproductive toxicity

Product: No data available.

Specified substance(s)

Potassium carbonate No data available.
 sodium hydroxide No data available.
 EDTA-tetrasodium salt No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specified substance(s)

Potassium carbonate No data available.
 sodium hydroxide No data available.
 EDTA-tetrasodium salt No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Specified substance(s)

Potassium carbonate No data available.
 sodium hydroxide No data available.
 EDTA-tetrasodium salt No data available.

Aspiration Hazard

Product: No data available.

Specified substance(s)

Potassium carbonate No data available.
 sodium hydroxide No data available.
 EDTA-tetrasodium salt No data available.

SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

Fish

Product: No data available.

Specified substance(s)

Potassium carbonate LC 50 (Oncorhynchus mykiss, 96 h): 68 mg/l (flow-through) experimental result
 NOAEL (Oncorhynchus mykiss, 96 h): 33 mg/l (flow-through) experimental result
 sodium hydroxide LC 50 (Leuciscus idus, 48 h): 189 mg/l experimental result
 EDTA-tetrasodium salt No data available.

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

Potassium carbonate EC 50 (48 h): 200 mg/l (Static) experimental result
 NOAEL (48 h): 120 mg/l (Static) experimental result

sodium hydroxide LC 50 (48 h): 30 - 100 mg/l experimental result
 EDTA-tetrasodium salt EC 50 (24 h): 610 mg/l (Static) experimental result

Chronic Toxicity

Fish

Product: No data available.

Specified substance(s)

Potassium carbonate No data available.
 sodium hydroxide No data available.
 EDTA-tetrasodium salt NOAEL (Danio rerio, 35 d): >= 25.7 mg/l (flow-through) interpreted

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

Potassium carbonate No data available.
 sodium hydroxide No data available.
 EDTA-tetrasodium salt No data available.

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s)

Potassium carbonate No data available.
 sodium hydroxide No data available.
 EDTA-tetrasodium salt No data available.

12.2 Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s)

Potassium carbonate No data available.
 sodium hydroxide No data available.
 EDTA-tetrasodium salt No data available.

BOD/COD Ratio

Product No data available.

Specified substance(s)

Potassium carbonate No data available.
 sodium hydroxide No data available.
 EDTA-tetrasodium salt No data available.

12.3 Bioaccumulative potential

Product: No data available.

Specified substance(s)

Potassium carbonate No data available.
 sodium hydroxide No data available.
 EDTA-tetrasodium salt No data available.

12.4 Mobility in soil:

No data available.

Known or predicted distribution to environmental compartments

Potassium carbonate No data available.
 sodium hydroxide No data available.
 EDTA-tetrasodium 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 bioaccumulative) criteria
Potassium carbonate	No data available.
sodium hydroxide	No data available.
EDTA-tetrasodium salt	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 washwater, 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:	UN 1823
14.2 UN Proper Shipping Name:	SODIUM HYDROXIDE, SOLID
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	1.00KG
Excepted quantity	No data available.
14.5 Environmental Hazards:	No
14.6 Special precautions for user:	–

RID

14.1 UN Number:	UN 1823
14.2 UN Proper Shipping Name	SODIUM HYDROXIDE, SOLID
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 1823
14.2 UN Proper Shipping Name: Sodium hydroxide, solid, mixture
14.3 Transport Hazard Class(es)
Class: 8
Label(s): 8
EmS No.: F-A, S-B
14.4 Packing Group: II
Limited quantity No data available.
Excepted quantity No data available.
14.5 Environmental Hazards: Not regulated.
14.6 Special precautions for user: –

IATA

14.1 UN Number: UN 1823
14.2 Proper Shipping Name: Sodium hydroxide, solid
14.3 Transport Hazard Class(es):
Class: 8
Label(s): 8
14.4 Packing Group: II
Limited quantity No data available.
Excepted quantity No data available.
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

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
sodium hydroxide	1310-73-2	1.0 - 10%
EDTA-tetrasodium salt	64-02-8	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

H302

Harmful if swallowed.

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.

Training information: No data available.

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

Met. Corr. 1, H290

Skin Corr. 1A, H314

Eye Dam. 1, H318

STOT SE 3, H335

Issue Date: 10.04.2017

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.