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

1.1 Product identifier

Product name: G135 PART A

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

Identified uses: Photographic developer concentrate
Uses advised against: For industrial use only

1.3 Details of the supplier of the safety data sheet

Manufacturer

Agfa-Gevaert NV
Septestraat 27
2640 Mortsel
Belgium

Telephone: +32 3 4445501
Fax: +32 3 4445503
E-mail: electronic.sds@agfa.com

National Supplier

Druck Ltd.
Inspection Technologies division
Fir Tree Lane
GROBY
Leicestershire
LE6 0FH
GREAT BRITAIN

Telephone: +44(0)8456015771
E-mail: trans.geituksales@ge.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.

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Physical Hazards		
Corrosive to metal	Category 1	H290: May be corrosive to metals.
Health Hazards		
Serious eye damage	Category 1	H318: Causes serious eye damage.
Skin sensitizer	Category 1	H317: May cause an allergic skin reaction.
Germ Cell Mutagenicity	Category 2	H341: Suspected of causing genetic defects.
Carcinogenicity	Category 2	H351: Suspected of causing cancer.

2.2 Label Elements

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Contains: hydroquinone
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt

Signal Word: Danger

Hazard Statement(s):
H290: May be corrosive to metals.
H318: Causes serious eye damage.
H317: May cause an allergic skin reaction.
H341: Suspected of causing genetic defects.
H351: Suspected of causing cancer.

Precautionary Statements

Prevention:
P201: Obtain special instructions before use.
P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER or doctor/ physician.
P308+P313: IF exposed or concerned: Get medical advice/attention.

2.3 Other hazards

Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes
Potassium carbonate	5 - <10%	584-08-7		01-2119532646-36;	No data available.	
hydroquinone	5 - <10%	123-31-9		01-2119524016-51-XXXX;	Aquatic Toxicity (Acute): 10; Aquatic Toxicity (Chronic):	#

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					1Aquatic Toxicity (Acute): 10; Aquatic Toxicity (Chronic):	
N-(hydroxyethyl) ethylenediaminetriacetic acid trisodium salt	1 - <3%	139-89-9		01-2119972845-22-XXXX;	No data available.	
Potassium bromide	1 - <5%	7758-02-3		01-2119962195-33-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).
This substance is listed as SVHC.

Classification

Chemical name	Classification	Notes
Potassium carbonate	Classification: Eye Irrit.: 2: H319; Skin Irrit.: 2: H315; STOT SE: 3: H335; Supplemental label information: None known.	None.
hydroquinone	Classification: Carc.: 2: H351; Eye Dam.: 1: H318; Acute Tox.: 4: H302; Muta.: 2: H341; Skin Sens.: 1B: H317; Aquatic Acute: 1: H400; Aquatic Chronic: 1: H410; Supplemental label information: None known.	None.
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	Classification: Eye Dam.: 1: H318; Acute Tox.: 4: H302; Supplemental label information: None known.	None.
Potassium bromide	Classification: Eye Irrit.: 2: H319; Supplemental label information: None known.	None.

CLP: Regulation No. 1272/2008.
The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Get medical attention if symptoms occur.

Inhalation: Move to fresh air.

Skin Contact: Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.

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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:	Rinse mouth thoroughly.
Personal Protection for First-aid Responders:	CAUTION! First aid personnel must be aware of own risk during rescue! See Section 8 of the SDS for Personal Protective Equipment.

4.2 Most important symptoms and effects, both acute and delayed

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

4.3 Indication of immediate medical attention and special treatment needed

Treatment:	Treat symptomatically.

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.

6.1.1 For non-emergency personnel: Use personal protective equipment.

6.1.2 For emergency responders: Warn everybody of potential hazards and evacuate if necessary. Use personal protective equipment.

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6.2 Environmental Precautions: Do not contaminate water sources or sewer. Contact local authorities in case of spillage to drain/aquatic environment. Prevent entry into waterways, sewer, basements or confined areas.

6.3 Methods and material for containment and cleaning up: Prevent further leakage or spillage if safe to do so. Stop the flow of material, if this is without risk. Small Spillages: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Clean surface thoroughly to remove residual contamination. Large Spillages: 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

Technical measures (e.g. Local and general ventilation): 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.

Safe handling advice: Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Do not get in eyes. Wash hands thoroughly after handling. Avoid contact with eyes, skin, and clothing.

Contact avoidance measures: Contact with incompatible materials.

7.2 Conditions for safe storage, including any incompatibilities

Safe storage conditions: Store locked up. Store in corrosive resistant container with a resistant inner liner.

Safe packaging materials: Suitable materials**:** Keep in original container.

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	Form of exposure	Exposure Limit Values	Source
hydroquinone	TWA		0.5 mg/m3	UK. EH40 Workplace Exposure Limits (WELs), as amended (12 2011)

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Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

DNEL-Values

Critical component	Type	Route of Exposure	Health Warnings	Remarks
Potassium carbonate	Workers	Inhalation	Local, long-term; 10 mg/m3	irritation respiratory tract
	General population	Inhalation	Local, long-term; 10 mg/m3	irritation respiratory tract
	General population	Dermal	Local, long-term; 8 mg/cm2	Skin irritation
	Workers	Dermal	Local, long-term; 16 mg/cm2	Skin irritation
hydroquinone	General population	Eyes	Local effect;	Medium hazard (no threshold derived)
	General population	Inhalation	Systemic, long-term; 1.05 mg/m3	Carcinogenicity
	Workers	Dermal	Systemic, long-term; 3.33 mg/kg	Carcinogenicity
	Workers	Eyes	Local effect;	Medium hazard (no threshold derived)
	Workers	Inhalation	Systemic, long-term; 2.1 mg/m3	Carcinogenicity
	General population	Oral	Systemic, long-term; 0.6 mg/kg	Carcinogenicity
	General population	Dermal	Systemic, long-term; 1.66 mg/kg	Carcinogenicity
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	General population	Inhalation	Systemic, long-term; 22 mg/m3	Repeated dose toxicity
	Workers	Inhalation	Systemic, long-term; 88 mg/m3	Repeated dose toxicity
	Workers	Eyes	Local effect;	Medium hazard (no threshold derived)
	General population	Eyes	Local effect;	Medium hazard (no threshold derived)
	General population	Inhalation	Local, long-term; 2.5 mg/m3	irritation respiratory tract
	Workers	Inhalation	Local, long-term; 10 mg/m3	irritation respiratory tract
	General population	Oral	Systemic, long-term; 12 mg/kg	Repeated dose toxicity
Potassium bromide	Workers	Inhalation	Systemic, long-term; 4.75 mg/m3	Repeated dose toxicity
	Workers	Dermal	Systemic, short-term; 95 mg/kg	Repeated dose toxicity
	General population	Dermal	Systemic, long-term; 95 mg/kg	Repeated dose toxicity
	General population	Dermal	Systemic, short-term; 95 mg/kg	Repeated dose toxicity
	General population	Oral	Systemic, short-term; 50 mg/kg	Acute toxicity
	Workers	Dermal	Systemic, long-term; 95 mg/kg	Repeated dose toxicity
	General population	Oral	Systemic, long-term; 0.475 mg/kg	Repeated dose toxicity
	Workers	Eyes	Local effect;	Low hazard (no threshold derived)
	General population	Eyes	Local effect;	Low hazard (no threshold derived)
	General population	Inhalation	Systemic, long-term; 1.66 mg/m3	Repeated dose toxicity

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PNEC-Values

Critical component	Environmental compartment	PNEC-Values	Remarks
hydroquinone	Aquatic (freshwater)	0.57 µg/l	
	Marine sediments	0.00049 mg/kg	
	soil	0.00064 mg/kg	
	Sewage treatment plant	0.71 mg/l	
	freshwater sediment	0.0049 mg/kg	
	Aquatic (marine water)	0.057 µg/l	
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	soil	0.184 mg/kg	
	Aquatic (marine water)	25.6 µg/l	
	freshwater sediment	0.922 mg/kg	
	Sewage treatment plant	5.89 mg/l	
	Aquatic (freshwater)	0.256 mg/l	
	Marine sediments	0.0922 mg/kg	
Potassium bromide	Sewage treatment plant	100 mg/l	
	Aquatic (marine water)	41 mg/l	
	soil	3.2 mg/kg	
	Aquatic (freshwater)	0.52 mg/l	

8.2 Exposure controls

Appropriate Engineering Controls: 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.

Monitoring methods: BS EN 14042:2003: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

Individual protection measures, such as personal protective equipment

General information Follow training instructions when handling this material. 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.

Eye/face protection: Safety goggles. EN 166.

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 (EN374), Glove thickness: > 0.35 mm, Break-through time: > 240 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.

Skin and Body Protection: Safety clothes : long sleeved clothing EN13688

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Respiratory Protection:	Under normal conditions of use, respirator protection is not required. In case of inadequate ventilation use suitable respirator (EN14387). Use respiratory equipment with combination filter, type AB/P2. Seek advice from local supervisor.
Hygiene measures:	Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Do not get in eyes. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin.
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:	Pale yellow
Odor:	Odorless
Odor Threshold:	No data available.
Freezing point:	< 32 °F/< 0 °C
Boiling Point:	> 212 °F/> 100 °C
Flammability:	Not flammable.
Upper/lower limit on flammability or explosive limits	
Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Flash Point:	> 199.99 °F/> 93.33 °C
Autoignition Temperature:	No data available.
Decomposition Temperature:	No data available.
pH:	11.85 (77 °F/25 °C)
Viscosity	
Dynamic viscosity:	No data available.
Kinematic viscosity:	No data available.
Flow Time:	No data available.
Solubility(ies)	
Solubility in Water:	Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	Not applicable Mixture
Vapor pressure:	23 hPa (68 °F/20 °C)
Relative density:	1.302
Density:	No data available.
Bulk density:	No data available.
Relative vapor density:	No data available.

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9.2 Other information

Explosive properties:	Not applicable
Oxidizing properties:	Not applicable
Metal Corrosion:	Corrosive to metal
VOC Content:	EC Directive 1999/13: 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:	May cause an allergic skin reaction.
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:	ATEmix: 5,248.22 mg/kg
Components:	
Potassium carbonate	LD 50 (Rat): > 2,000 mg/kg Experimental result, Key study
hydroquinone	LD 50 (Rat): 367.3 mg/kg Key study
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	LD 50 (Rat): 1,913 mg/kg Read-across from supporting substance (structural analogue or surrogate), Key study LD 50 (Rat): > 1,780 - < 2,000 mg/kg Read-across from supporting substance (structural analogue or surrogate), Key study LD 50 (Rat): 1,780 mg/kg Read-across from supporting substance (structural analogue or surrogate), Key study
Potassium bromide	LD 50 (Rat): 2,000 mg/kg Key study

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Dermal

Product:	Not classified for acute toxicity based on available data.
Components:	
Potassium carbonate	LD 50 (Rabbit): > 2,000 mg/kg Experimental result, Key study
hydroquinone	LD 50 (Rabbit): > 2,000 mg/kg Experimental result, Key study
N-(hydroxyethyl)ethylene diaminetriacetic acid trisodium salt	No data available.
Potassium bromide	LD 50 (Rabbit): > 2,000 mg/kg Read-across from supporting substance (structural analogue or surrogate), Key study

Inhalation

Product:	Not classified for acute toxicity based on available data.
Components:	
Potassium carbonate	No data available.
hydroquinone	No data available.
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	LC 0 (Rat, 4 h): 3.95 mg/l Aerosol, Experimental result, Key study LC 0 (Rat, 4 h): 5.138 mg/m3 Aerosol, Experimental result, Key study LC 0 (Rat, 4 h): > 10.054 mg/l Aerosol, Experimental result, Key study
Potassium bromide	No data available.

Repeated dose toxicity

Product:	No data available.
Components:	
Potassium carbonate	No data available.
hydroquinone	No data available.
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	NOAEL (Rat(Female, Male), Oral, 103 Weeks): >= 500 mg/kg
Potassium bromide	No data available.

Skin Corrosion/Irritation:	Not irritating
Product:	The health hazard evaluation is based on the toxicological properties of a similar material.
Components:	
Potassium carbonate	Irritating Irritating to skin.
hydroquinone	in vivo Not irritant Experimental result, Weight of Evidence study
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	in vivo Not irritant Read-across from supporting substance (structural analogue or surrogate), Supporting study
Potassium bromide	No data available.

Serious Eye Damage/Eye Irritation:	Risk of serious damage to eyes.

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Product:	The health hazard evaluation is based on the toxicological properties of a similar material.
Components:	
Potassium carbonate	Irritating
hydroquinone	No data available.
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	No data available.
Potassium bromide	in vivo Irritating EU

Respiratory or Skin Sensitization:

Product:	May cause an allergic skin reaction.
Components:	
Potassium carbonate	Skin sensitization:, in vivo (Guinea pig): Non sensitising
hydroquinone	No data available.
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	No data available.
Potassium bromide	Skin sensitization:, in vivo (Guinea pig): Non sensitising

Germ Cell Mutagenicity

Product:	Suspected of causing genetic defects.

In vitro

Components:	
Potassium carbonate	Based on available data, the classification criteria are not met.
hydroquinone	No data available.
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	No data available.
Potassium bromide	No data available.

In vivo

Components:	
Potassium carbonate	No data available.
hydroquinone	No data available.
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	No data available.
Potassium bromide	No data available.

Carcinogenicity

Product:	Suspected of causing cancer.
Components:	
Potassium carbonate	Based on available data, the classification criteria are not met.
hydroquinone	No data available.

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N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	No data available.
Potassium bromide	No data available.

Reproductive toxicity

Product:	Based on available data, the classification criteria are not met.

Components:

Potassium carbonate	Based on available data, the classification criteria are not met.
hydroquinone	No data available.
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	No data available.
Potassium bromide	No data available.

Specific Target Organ Toxicity - Single Exposure

Product:	Based on available data, the classification criteria are not met.

Components:

Potassium carbonate	Irritating to respiratory system.
hydroquinone	No data available.
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	No data available.
Potassium bromide	No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product:	Based on available data, the classification criteria are not met.

Components:

Potassium carbonate	No data available.
hydroquinone	No data available.
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	No data available.
Potassium bromide	No data available.

Aspiration Hazard

Product:	Based on available data, the classification criteria are not met.

Components:

Potassium carbonate	No data available.
hydroquinone	No data available.
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	No data available.
Potassium bromide	No data available.

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SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

Remarks:

This product has no known ecotoxicological effects.

Fish

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

Components

Potassium carbonate	LC 50 (Oncorhynchus mykiss, 96 h): 68 mg/l (flow-through) Experimental result, Key study NOAEL (Oncorhynchus mykiss, 96 h): 33 mg/l (flow-through) Experimental result, Key study
hydroquinone	LC 50 (Oncorhynchus mykiss, 96 h): 0.638 mg/l (flow-through) Experimental result, Key study
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	LC 50 (Psetta maxima, 96 h): > 738 mg/l (semi-static) Experimental result, Key study LC 50 (Pimephales promelas, 96 h): 372 mg/l (Static) Experimental result, Key study
Potassium bromide	LC 50 (Psetta maxima, juvenile, 96 h): > 440 mg/l (semi-static) Read-across from supporting substance (structural analogue or surrogate), Key study

Aquatic Invertebrates

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

Components

Potassium carbonate	EC 50 (Daphnia pulex, 48 h): 200 mg/l (Static) Experimental result, Key study
hydroquinone	EC 50 (Daphnia magna, 48 h): 0.134 mg/l (semi-static) experimental result Experimental result, Key study
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	NOAEL (Daphnia magna, 48 h): < 135 mg/l (Static) Experimental result, Key study LC 50 (Daphnia magna, 48 h): 192 mg/l (Static) Experimental result, Key study
Potassium bromide	EC 50 (Daphnia magna, 48 h): > 100 mg/l (Static) experimental result Experimental result, Key study

Toxicity to Aquatic Plants

Product:	No data available.

Components

Potassium carbonate	No data available.
hydroquinone	No data available.
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	No data available.
Potassium bromide	No data available.

Toxicity to microorganisms

Product:	No data available.

Components

Potassium carbonate	No data available.
hydroquinone	No data available.
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	No data available
Potassium bromide	No data available.

Chronic Toxicity

Remarks:

This product has no known ecotoxicological effects.

Fish

Product:	No data available.

Components

Potassium carbonate	Not expected to be harmful to aquatic organisms.
hydroquinone	No data available.
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	NOAEL (Danio rerio, 35 d): >= 25.7 mg/l (flow-through) Read-across from supporting substance (structural analogue or surrogate), Key study
Potassium bromide	NOAEL (Poecilia reticulata, 124 d): 10 mg/l (semi-static) read-across from supporting substance (structural analogue or surrogate) Read-across from supporting substance (structural analogue or surrogate), Key study

Aquatic Invertebrates

Product:	No data available.

Components

Potassium carbonate	Not expected to be harmful to aquatic organisms.
hydroquinone	No data available.
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	No data available.
Potassium bromide	No data available.

Toxicity to Aquatic Plants

Product:	No data available.

Components

Potassium carbonate	No data available.
hydroquinone	No data available.
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	No data available.
Potassium bromide	No data available.

12.2 Persistence and Degradability

Biodegradation

Product:	No data available.

Components

Potassium carbonate	The methods for determining biodegradability are not applicable to inorganic substances.
hydroquinone	(14 d): 70 % Detected in water. Experimental result, Supporting study
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	(28 d): 90 - 100 % Detected in water. Read-across from supporting substance (structural analogue or surrogate), Weight of Evidence study
Potassium bromide	No data available.

BOD/COD Ratio

Product	No data available.

Components

Potassium carbonate	No data available.
hydroquinone	No data available.
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	No data available.
Potassium bromide	No data available.

12.3 Bioaccumulative potential

Product:	No data available.

Components

Potassium carbonate	Will not bio-accumulate.
hydroquinone	No data available.
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	Lepomis macrochirus, Bioconcentration Factor (BCF): 1.8 Aquatic sediment Read-across from supporting substance (structural analogue or surrogate), Key study Lepomis macrochirus, Bioconcentration Factor (BCF): 1.1 Aquatic sediment Read-across from supporting substance (structural analogue or surrogate), Key study
Potassium bromide	Artemia salina, Bioconcentration Factor (BCF): 0.23 Aquatic sediment Read-across from supporting substance (structural analogue or surrogate), Key study Fish, Bioconcentration Factor (BCF): 1.41 Aquatic sediment QSAR, Key study

12.4 Mobility in soil

Product:	No data available.

Components

Potassium carbonate	No data available.
hydroquinone	No data available.
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	No data available.

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Potassium bromide	No data available.

12.5 Results of PBT and vPvB assessment

Product: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Components

Potassium carbonate	No data available.
hydroquinone	No data available.
N-(hydroxyethyl)ethylenediaminetriacetic acid trisodium salt	No data available.
Potassium bromide	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: 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.

Contaminated Packaging: Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1 UN number or ID number:	UN 1760
14.2 UN Proper Shipping Name:	CORROSIVE LIQUID, N.O.S.(potassium salt solution)
14.3 Transport Hazard Class(es)	
Class:	8
Label(s):	8
Hazard No. (ADR):	80
Tunnel restriction code:	(E)
14.4 Packing Group:	III
Limited quantity	5.00L
Excepted quantity	E1
14.5 Environmental Hazards:	No

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14.6 Special precautions for user: –

RID

14.1 UN number or ID number:	UN 1760
14.2 UN Proper Shipping Name	CORROSIVE LIQUID, N.O.S.(potassium salt solution)
14.3 Transport Hazard Class(es)	
Class:	8
Label(s):	8
14.4 Packing Group:	III
14.5 Environmental Hazards:	No
14.6 Special precautions for user:	–

ADN

14.1 UN number or ID number:	UN 1760
14.2 UN Proper Shipping Name	CORROSIVE LIQUID, N.O.S.(potassium salt solution)
14.3 Transport Hazard Class(es)	
Class:	8
Label(s):	8
14.4 Packing Group:	III
14.5 Environmental Hazards:	No
14.6 Special precautions for user:	–

IMDG

14.1 UN number or ID number:	UN 1760
14.2 UN Proper Shipping Name:	CORROSIVE LIQUID, N.O.S.(potassium salt solution)
14.3 Transport Hazard Class(es)	
Class:	8
Label(s):	8
EmS No.:	F-A, S-B
14.4 Packing Group:	III
<03EHS_L_TEXT(ZAGFA-ARI-S-100017321)[D:Limited quantity]>	5.00L
Excepted quantity	E1
14.5 Environmental Hazards:	Not regulated.
14.6 Special precautions for user:	–

IATA

14.1 UN number or ID number:	UN 1760
14.2 Proper Shipping Name:	Corrosive liquid, n.o.s.(potassium salt solution)
14.3 Transport Hazard Class(es):	
Class:	8
Label(s):	8
14.4 Packing Group:	III
Excepted quantity	E1
14.5 Environmental Hazards:	No
14.6 Special precautions for user:	–

Other information

Passenger and cargo aircraft:	Allowed.
Cargo aircraft only:	Allowed.

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14.7 Maritime transport in bulk according to IMO instruments: not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

EU Regulations

EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC): None present or none present in regulated quantities.

EU. REACH Annex XIV, Substances Subject to Authorization: None present or none present in regulated quantities.

EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), as amended: None present or none present in regulated quantities.

Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled Substances: None present or none present in regulated quantities.

Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex II, New Substances: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended: None present or none present in regulated quantities.

EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, Annex I: None present or none present in regulated quantities.

15.2 Chemical safety assessment: Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms:

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

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Classification according to Regulation (EC) No 1272/2008 as amended.	Classification procedure
Corrosive to metal, Category 1	Calculation method

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Serious eye damage, Category 1	Calculation method
Skin sensitizer, Category 1	Calculation method
Germ Cell Mutagenicity, Category 2	Calculation method
Carcinogenicity, Category 2	Calculation method

Wording of the statements in section 2 and 3

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Training information: Follow training instructions when handling this material.

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.

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Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567

Safe Use of Mixtures Information (SUMI)

Disclaimer

This SUMI is a generic document for communicating conditions of safe use of a product in response to the REACH obligation.This document relates only to conditions of safe use and is not specific to a product. By adding this SUMI to a specific product Safety Data Sheet (SDS), the importer/formulator declares that the mixture can safely be used following the instructions below. Following occupational health legislation, the employer of workers remains responsible for communicating relevant use information to employees. When developing workplace instructions foremployees, SUMI Sheets should always be considered in combination with the SDS and the label of the product. Derived No Effect Levels (DNEL) and Predicted No Effect Concentration (PNEC) values of substances derived from the Chemical Safety Assessment (CSA) will be given in section 8 of the SDS.The REACH registration numbers, where applicable, complete an extended product SDS.

Operational conditions

Max Duration	Up to 8 h/d
Frequency of exposure	< 240 d/y
Physical state	liquid
Process conditions	Covers use at ambient temperatures. Adequate ventilation should be provided so that exposure limits are not exceeded. As a rule, at least 10 air changes per hour are recommended at the workplace. Avoid contact with skin and eyes. Regular cleaning of equipment, work area and clothing. Supervision in place to check that Risk Management Measures (RMM's) in place are being correctly used and Occupational Conditions (OC's) followed.

Risk management measures

Conditions and measures related to Personal Protection Equipment (PPE), hygiene and health evaluation	Wear safety glasses with side shields (or goggles). Chemical goggles are recommended. Wear chemical-resistant gloves and protective clothing. See Section 8 of the SDS for Personal Protective Equipment. No personal respiratory protective equipment normally required. Eye wash station and emergency showers are recommended. Avoid breathing mists or vapors. Avoid contact with eyes, skin, and clothing. Training of worker in relation to proper use and maintenance of the PPE must be ensured.
	

Good practice advice

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Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567

Use personal protective equipment as required. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice. Use only with adequate ventilation. Do not eat, drink or smoke when using the product. Wash contaminated clothing before reuse. Store at room temperature in the original container.	

Environmental Precautions

Do not allow to enter drains, sewers or watercourses.
Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Dispose of waste and residues in accordance with local authority requirements.

Use descriptors

IS - Use at industrial sites.
PW - Widespread use by professional workers.
SU7 - Printing and reproduction media.
PC30 - Photochemicals
PROC3 - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition.
PROC5 - Mixing or blending in batch processes.
PROC8a - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities.
PROC8b - Transfer of substance or mixture (charging and discharging) at dedicated facilities.
PROC13 - Treatment of articles by dipping and pouring.
PROC28 - Manual maintenance (cleaning and repair) of machinery
ERC6b - Use of reactive processing aid at industrial site (no inclusion into or onto article)
ERC8b - Widespread use of reactive processing aid (no inclusion into or onto article, indoor)

Additional information on product composition

In section 2 of the SDS as well as on the label,the classification of the mixture is provided.
All ingredients contributing to the classification are stated in Section 3 of the SDS.
Relevant limit values of ingredients on which the exposure assessment is based, are listed in section 8 of the SDS.
Note that this will be the concentrate used to create the working strength (WS) solution.