SAFETY DATA SHEET

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

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

1.1 Product identifier

Product name: G128

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

Supplier

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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Health Hazards

Skin irritation	Category 2	H315: Causes skin irritation.
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

Contains: hydroquinone
1-Phenyltetrazole-5-thiol

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Signal Word: Danger

Hazard Statement(s):
H315: Causes skin irritation.
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.
P272: Contaminated work clothing should not be allowed out of the workplace.

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
Diethylene glycol	5 - <10%	111-46-6	203-872-2	01-2119457857-21-XXXX;	No data available.	#
hydroquinone	5 - <10%	123-31-9	204-617-8	01-2119524016-51-0002;	Aquatic Toxicity (Acute): 10; Aquatic Toxicity (Chronic):	#

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					Aquatic Toxicity (Acute): 10; Aquatic Toxicity (Chronic): 10	
Potassium carbonate	1 - <5%	584-08-7	209-529-3	01-2119532646-36;	No data available.	
1-Phenyltetrazole-5-thiol	0.1 - <1%	86-93-1	201-710-5	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).
This substance is listed as SVHC.

Classification

Chemical name	Classification	Notes
Diethylene glycol	Classification: Acute Tox.: 4: H302; Acute Tox.: 4: H302;	No data available.
hydroquinone	Classification: Carc.: 2: H351; Muta.: 2: H341; Eye Dam.: 1: H318; Skin Sens.: 1: H317; Carc.: 2: H351; Muta.: 2: H341; Acute Tox.: 4: H302; Eye Dam.: 1: H318; Skin Sens.: 1: H317; Acute Tox.: 4: H302; Aquatic Acute: 1: H400; Aquatic Acute: 1: H400; Aquatic Chronic: 1: H410;	No data available.
Potassium carbonate	Classification: Eye Irrit.: 2: H319; Skin Irrit.: 2: H315; STOT SE: 3: H335;	No data available.
1-Phenyltetrazole-5-thiol	Classification: Flam. Sol.: 1: H228; Eye Irrit.: 2: H319; Skin Sens.: 1: H317; Aquatic Chronic: 4: H413;	No data available.

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 necessary first-aid measures

General information: Get medical attention if symptoms occur.

Inhalation: Move to fresh air.

Skin Contact: Get medical attention. 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.

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 POISON CENTER/doctor if you feel unwell. Rinse mouth.
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. Avoid breathing dust/fume/gas/mist/vapors/spray. Provide adequate ventilation.
6.1.1 For non-emergency personnel:	Use personal protective equipment.

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

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

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 skin. 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 tightly closed original container in a dry, cool and well-ventilated place. Store away from incompatible materials.

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

7.3 Specific end use(s): For industrial use only

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical name	Type	Exposure Limit Values	Source

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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

Diethylene glycol	TWA	23 ppm 101 mg/m3	UK. EH40 Workplace Exposure Limits (WELs), as amended (12 2011)
hydroquinone	TWA	0.5 mg/m3	UK. EH40 Workplace Exposure Limits (WELs), as amended (12 2011)

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
Diethylene glycol	Workers	Inhalation	Local, long-term; 60 mg/m3	irritation respiratory tract
	General population	Eyes	Local effect;	No hazard identified
	Workers	Eyes	Local effect;	No hazard identified
	General population	Inhalation	Local, long-term; 12 mg/m3	irritation respiratory tract
	General population	Inhalation	Systemic, long-term; 12 mg/m3	irritation respiratory tract
	Workers	Inhalation	Systemic, long-term; 44 mg/m3	
	General population	Dermal	Systemic, long-term; 21 mg/kg	Repeated dose toxicity
	Workers	Dermal	Systemic, long-term; 43 mg/kg	Repeated dose toxicity
hydroquinone	General population	Eyes	Local effect;	Medium hazard (no threshold derived)
	General population	Inhalation	Systemic, long-term; 1.05 mg/m3	Carcinogenicity
	Workers	Eyes	Local effect;	Medium hazard (no threshold derived)
	Workers	Inhalation	Systemic, long-term; 2.1 mg/m3	Carcinogenicity
	General population	Dermal	Systemic, long-term; 1.66 mg/kg	Carcinogenicity
	General population	Oral	Systemic, long-term; 0.6 mg/kg	Carcinogenicity
	Workers	Dermal	Systemic, long-term; 3.33 mg/kg	Carcinogenicity
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

PNEC-Values

Critical component	Environmental compartment	PNEC-Values	Remarks
Diethylene glycol	soil	1.53 mg/kg	
	Aquatic (marine water)	1 mg/l	
	Aquatic (freshwater)	10 mg/l	
	freshwater sediment	20.9 mg/kg	
	Sewage treatment plant	199.5 mg/l	
	Marine sediments	2.09 mg/kg	
hydroquinone	Aquatic (marine water)	0.057 µg/l	
	freshwater sediment	0.0049 mg/kg	
	Sewage treatment plant	0.71 mg/l	
	soil	0.00064 mg/kg	
	Marine sediments	0.00049 mg/kg	
	Aquatic (freshwater)	0.57 µg/l	

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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

Respiratory Protection: In case of inadequate ventilation use suitable respirator (EN14387). 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. Wash contaminated clothing before reuse. Avoid contact with skin. Contaminated work clothing should not be allowed out of the workplace.

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

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Color:	Pale yellow
Odor:	Slight odor
Odor Threshold:	No data available.
pH:	11.1 (77 °F/25 °C)
Freezing point:	< 32 °F/< 0 °C
Boiling Point:	> 212 °F/> 100 °C
Flash Point:	> 212 °F/> 100 °C
Evaporation Rate:	No data available.
Flammability:	Not flammable.
Upper/lower limit on flammability or explosive limits	
Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Vapor pressure:	23 hPa (68 °F/20 °C)
Relative vapor density:	No data available.
Density:	No data available.
Relative density:	1.2950 (68 °F/20 °C)
Solubility(ies)	
Solubility in Water:	Miscible with water.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	Not applicable Mixture
Autoignition Temperature:	not determined
Decomposition Temperature:	No data available.
Viscosity	
Dynamic viscosity:	No data available.
Kinematic viscosity:	3.14 mm2/s (68 °F/20 °C)
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)

SECTION 10: Stability and reactivity

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

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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: Causes skin irritation. Causes skin irritation. May cause an allergic skin reaction.

Eye contact: Eye contact is possible and should be avoided. 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: 3,068.34 mg/kg
Components:	
Diethylene glycol	ATE: 500 mg/kg
hydroquinone	LD 50 (Rat): 367.3 mg/kg Experimental result, Key study
Potassium carbonate	LD 50 (Rat): > 2,000 mg/kg Experimental result, Key study
1-Phenyltetrazole-5-thiol	LD 50 (Rat): > 5,000 mg/kg

Dermal

Product:	Not classified for acute toxicity based on available data.
Components:	
Diethylene glycol	LD 50 (Rabbit): 13,300 mg/kg
hydroquinone	LD 50 (Rabbit): > 2,000 mg/kg Experimental result, Key study
Potassium carbonate	LD 50 (Rabbit): > 2,000 mg/kg Experimental result, Key study
1-Phenyltetrazole-5-thiol	No data available.

Inhalation

Product:	Not classified for acute toxicity based on available data.
Components:	
Diethylene glycol	No data available.
hydroquinone	LC 0 (Rat, 1 h): >= 7,800 mg/m3 Aerosol, Read-across from supporting substance (structural analogue or surrogate), Supporting study
Potassium carbonate	No data available.
1-Phenyltetrazole-5-thiol	No data available.

Repeated dose toxicity

Product:	No data available.

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Components:

Diethylene glycol	No data available.
hydroquinone	No data available.
Potassium carbonate	No data available.
1-Phenyltetrazole-5-thiol	No data available.

Skin Corrosion/Irritation: Irritating.

Product: Causes skin irritation.

Components:

Diethylene glycol	No data available.
hydroquinone	in vivo Not irritant Experimental result, Weight of Evidence study
Potassium carbonate	Irritating Irritating to skin.
1-Phenyltetrazole-5-thiol	No data available.

Serious Eye Damage/Eye Irritation:

Product: Causes serious eye damage.

Components:

Diethylene glycol	in vivo Not irritating
hydroquinone	No data available.
Potassium carbonate	Irritating
1-Phenyltetrazole-5-thiol	Causes serious eye irritation.

Respiratory or Skin Sensitization:

Product: May cause an allergic skin reaction.

Components:

Diethylene glycol	Skin sensitization:, in vivo (Guinea pig): Non sensitising
hydroquinone	Skin sensitization:, in vivo (Guinea pig): Sensitising
Potassium carbonate	Skin sensitization:, in vivo (Guinea pig): Non sensitising
1-Phenyltetrazole-5-thiol	No data available.

Germ Cell Mutagenicity

Product: Suspected of causing genetic defects.

In vitro

Components:

Diethylene glycol	No data available.
hydroquinone	No data available.
Potassium carbonate	Based on available data, the classification criteria are not met.
1-Phenyltetrazole-5-thiol	No data available.

In vivo

Components:

Diethylene glycol	No data available.
hydroquinone	No data available.
Potassium carbonate	No data available.
1-Phenyltetrazole-5-thiol	No data available.

Carcinogenicity

Product: Suspected of causing cancer.

Components:

Diethylene glycol	No data available.
hydroquinone	No data available.
Potassium carbonate	Based on available data, the classification criteria are not met.
1-Phenyltetrazole-5-thiol	No data available.

Reproductive toxicity

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

Components:

Diethylene glycol	No data available.
hydroquinone	No data available.
Potassium carbonate	Based on available data, the classification criteria are not met.
1-Phenyltetrazole-5-thiol	No data available.

Specific Target Organ Toxicity - Single Exposure

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

Components:

Diethylene glycol	No data available.
hydroquinone	No data available.
Potassium carbonate	Irritating to respiratory system.
1-Phenyltetrazole-5-thiol	No data available.

Specific Target Organ Toxicity - Repeated Exposure

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

Components:

Diethylene glycol	No data available.
hydroquinone	No data available.
Potassium carbonate	No data available.
1-Phenyltetrazole-5-thiol	No data available.

Aspiration Hazard

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

Components:

Diethylene glycol	No data available.
hydroquinone	No data available.
Potassium carbonate	No data available.
1-Phenyltetrazole-5-thiol	No data available.

SECTION 12: Ecological information

General information: Not classified for acute toxicity based on available data.

12.1 Toxicity

Acute toxicity

Remarks:

This product has no known ecotoxicological effects.

Fish

Product: No data available.

Components

Diethylene glycol	LC 50 (Pimephales promelas, 96 h): 75,200 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
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
1-Phenyltetrazole-5-thiol	LC 0 (Zebra danio (Danio rerio), 24 h): 10,000 mg/l

Aquatic Invertebrates

Product: No data available.

Components

Diethylene glycol	EC 50 (Daphnia magna, 24 h): > 10,000 mg/l (Static) Experimental result, Key study
hydroquinone	EC 50 (Daphnia magna, 48 h): 0.134 mg/l (semi-static) Experimental result, Key study
Potassium carbonate	EC 50 (Daphnia pulex, 48 h): 200 mg/l (Static) Experimental result, Key study
1-Phenyltetrazole-5-thiol	No data available.

Toxicity to Aquatic Plants

Product: No data available.

Components

Diethylene glycol	No data available.
hydroquinone	No data available.
Potassium carbonate	No data available.
1-Phenyltetrazole-5-thiol	No data available.

Toxicity to microorganisms

Product: No data available.

Components

Diethylene glycol	No data available.
hydroquinone	No data available.
Potassium carbonate	No data available.
1-Phenyltetrazole-5-thiol	EC50 (Bacteria, 0.5 h): 3,740 mg/l (QSAR)

Chronic Toxicity

Remarks:

This product has no known ecotoxicological effects.

Fish

Product: No data available.

Components

Diethylene glycol	No data available.
hydroquinone	No data available.
Potassium carbonate	Not expected to be harmful to aquatic organisms.
1-Phenyltetrazole-5-thiol	No data available.

Aquatic Invertebrates

Product: No data available.

Components

Diethylene glycol	No data available.
hydroquinone	No data available.
Potassium carbonate	Not expected to be harmful to aquatic organisms.
1-Phenyltetrazole-5-thiol	No data available.

Toxicity to Aquatic Plants

Product: No data available.

Components

Diethylene glycol	No data available.
hydroquinone	No data available.
Potassium carbonate	No data available.
1-Phenyltetrazole-5-thiol	No data available.

12.2 Persistence and Degradability

Biodegradation

Product: No data available.

Components

Diethylene glycol	(10 d): 90 - 100 % Detected in water. Read-across based on grouping of substances (category approach), Weight of Evidence study
hydroquinone	(14 d): 70 % Detected in water. Experimental result, Supporting study
Potassium carbonate	The methods for determining biodegradability are not applicable to inorganic substances.
1-Phenyltetrazole-5-thiol	No data available.

BOD/COD Ratio

Product No data available.

Components

Diethylene glycol	No data available.
hydroquinone	No data available.
Potassium carbonate	No data available.
1-Phenyltetrazole-5-thiol	No data available.

12.3 Bioaccumulative potential

Product: No data available.

Components

Diethylene glycol	Leuciscus idus, Bioconcentration Factor (BCF): 100 Aquatic sediment Experimental result, Key study
hydroquinone	No data available.
Potassium carbonate	Will not bio-accumulate.
1-Phenyltetrazole-5-thiol	No data available.

12.4 Mobility in soil

Product:	No data available.

Components

Diethylene glycol	No data available.
hydroquinone	No data available.
Potassium carbonate	No data available.
1-Phenyltetrazole-5-thiol	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

Diethylene glycol	No data available.
hydroquinone	No data available.
Potassium carbonate	No data available.
1-Phenyltetrazole-5-thiol	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. Do not allow to enter drains, sewers or watercourses. 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. 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:	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 or ID 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.

ADN

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

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

SECTION 15: Regulatory information

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

EU Regulations

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:

ADR	Accord européen relatif au transport international des marchandises Dangereuses par Route
ADNR	Accord européen relatif au transport international des marchandises Dangereuses par la Rhin
AGW	Arbeitsplatzgrenswerte (DE)
ATEmix	Acute toxicity estimate of the mixture
CLP	Classification, Labelling and Packaging of substances and mixtures
CMR	carcinogenicity, mutagenicity and toxicity for reproduction
DNEL	Derived No Effect Level
EC0	Effective Concentration 0%
EC5	Effective Concentration 5%
EC10	Effective Concentration 10%
EC50	Median Effective Concentration
EC100	Effective Concentration 100%
EH40 WEL	Workplace Exposure Limit (GB)
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IC50	inhibitory concentration 50%
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
IUCLID	International Uniform ChemicaL Information Database
LC50	Lethal Concentration 50%
LC100	Lethal Concentration 100%
LOAEL	Lowest Observed Adverse Effect Level
LDL0	Lethal Dose (minimum found to be lethal)
LD50	Lethal Dose 50%
MAC	Maximaal Aanvaardbare Concentratie (NL)
MAK	Maximale Arbeitsplatz-Konzentration

NOAEL	No Observed Adverse Effect Level
NOEL	No Observed Effect Level
NOEC	No Observed Effect Concentration
OEL	Occupatianal Exposure Limit
PBT	Persistent, Bioaccumulative and Toxic substance
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Transport of Dangerous Goods by Rail
STEL	Short Term Exposure Limit
TLV	Treshold Limit Value
TRGS900	Arbeitsplatzgrenswerte (DE)
TWA	Time Weighted Average
VOC	Volatile Organic Compound
vPvB	very Persistent and very Bioaccumulative substance

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
Skin irritation, Category 2	Calculation method
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

H228	Flammable solid.
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.
H413	May cause long lasting harmful effects to aquatic life.

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.

SAFETY DATA SHEET

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

SAFETY DATA SHEET

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.