

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: Filmstar Developer

Product No.: 71320

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

Identified uses: Photographic developer concentrate

Uses advised against: Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Manufacturer

Bungard Elektronik GmbH & Co. KG
Rilkestraße 1
51570 Windeck
Telefon +49 2292/9 2828-0 Telefax
+49 2292/9 2828-29 E-Mail:
info@bungard.de

1.4 Emergency telephone number:

Emergency telephone number: Medical Emergency information in case of poisoning: Poison Information Center
Mainz – 24h – Phone: +49 6131 19240)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified according to the legislation in force.

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

Health Hazards

Serious eye damage	Category 1	H318: Causes serious eye damage.
Skin sensitizer	Category 1	H317: May cause an allergic skin reaction.
Product: Germ Cell Mutagenicity	No data available.	H341: Suspected of causing genetic defects.
Carcinogenicity	Category 2	H351: Suspected of causing cancer.
Specified substance(s)		

2.2 Label Elements

Contains:

Hydroquinone



Signal Words:

Danger

Hazard Statement(s):

H317: May cause an allergic skin reaction.
 H318: Causes serious eye damage.
 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/doctor/...
 P308+P313: IF exposed or concerned: Get medical advice/attention.
 P363: Wash contaminated clothing before reuse.

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	5 - <10%	584-08-7	209-529-3	01-2119532646-36	No data available.	
Hydroquinone	3 - <5%	123-31-9	204-617-8	01-2119524016-	10	#

				51-0002		
Sodium bromide	1 - <5%	7647-15-6	231-599-9	No data available.	No data available.	
1-Phenyl-3-pyrazolidone	0.1 - <1%	92-43-3	202-155-1	No data available.	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).

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

Classification

Chemical name	Classification	Notes
Potassium carbonate	Eye Irrit.: 2: H319 Skin Irrit.: 2: H315 STOT SE: 3: H335	
Hydroquinone	Aquatic Acute: 1: H400 Skin Sens.: 1: H317 Eye Dam.: 1: H318 Acute Tox.: 4: H302 Muta.: 2: H341 Carc.: 2: H351	No data available.
Sodium bromide	No data available.	
1-Phenyl-3-pyrazolidone	Acute Tox.: 4: H302 Aquatic Chronic: 2: H411	No data available.
1-Phenyltetrazole-5-thiol	Flam. Sol.: 1: H228 Eye Irrit.: 2: H319 Skin Sens.: 1: H317 Aquatic Chronic: 4: H413	

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.

Eye contact: Rinse immediately with plenty of water.

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.

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.

Product: No data available.

4.3 Indication of any immediate medical attention and special treatment needed

Specified substance(s)

Hazards:	See section 11 of the SDS for additional information on health hazards.
Treatment:	Get medical attention if symptoms occur.

SECTION 5: Firefighting measures

General Fire Hazards:	No unusual fire or explosion hazards noted.
5.1 Extinguishing media	
Suitable extinguishing media:	Extinguish with foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media:	Do not use water jet as an extinguisher, as this will spread the fire.
5.2 Special hazards arising from the substance or mixture:	During fire, gases hazardous to health may be formed.
5.3 Advice for firefighters	
Special fire fighting procedures:	No data available.
Special protective equipment for fire-fighters:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:	See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.
6.2 Environmental Precautions:	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.
6.3 Methods and material for containment and cleaning up:	Stop the flow of material, if this is without risk. Absorb with sand or other inert absorbent.
6.4 Reference to other sections:	For personal protection see section 8. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling:	Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after handling.
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7.2 Conditions for safe storage, Store locked up.
including any
incompatibilities:

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
Hydroquinone	TWA	0.5 mg/m3	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)

Biological Limit Values

None.

DNEL-Values

Critical component	type	Route of Exposure		Remarks
Potassium sulphite	General population	Oral	14 mg/kg	Repeated dose toxicity
	General population	Inhalation	111 mg/m3	Repeated dose toxicity
	Workers	Inhalation	374 mg/m3	Repeated dose toxicity
Potassium carbonate	General population	Inhalation	10 mg/m3	Irritating to respiratory system.
	Workers	Dermal	16 mg/cm2	Skin irritation/corrosion
	General population	Dermal	8 mg/cm2	Skin irritation/corrosion
	Workers	Inhalation	10 mg/m3	Irritating to respiratory system.
Sodium sulphite	General population	Oral	11 mg/kg	Repeated dose toxicity
	General population	Inhalation	88 mg/m3	Repeated dose toxicity
	Workers	Inhalation	298 mg/m3	Repeated dose toxicity
Sodium bromide	Workers	Dermal	47.6 mg/kg	Acute toxicity
	General population	Dermal	83.3 mg/cm2	Acute toxicity
	General population	Dermal	0.475 mg/kg	Repeated dose toxicity
	General population	Inhalation	147 mg/m3	Acute toxicity
	General population	Inhalation	1.66 mg/m3	Repeated dose toxicity
	General population	Inhalation	0.475 mg/m3	Repeated dose toxicity
	Workers	Dermal	1.7 mg/cm2	Repeated dose toxicity
	Workers	Inhalation	4.75 mg/m3	Repeated dose toxicity
	General population	Dermal	33.3 mg/kg	Acute toxicity
	Workers	Inhalation	420 mg/m3	Acute toxicity
	Workers	Dermal	119 mg/cm2	Acute toxicity
	General population	Oral	42 mg/kg	Acute toxicity
	General population	Inhalation	147 mg/m3	Acute toxicity
	Workers	Inhalation	420 mg/m3	Acute toxicity
	General population	Oral	0.475 mg/kg	Repeated dose toxicity
	General population	Dermal	1.19 mg/cm2	Repeated dose toxicity
	Workers	Dermal	0.68 mg/kg	Repeated dose toxicity
	Workers	Inhalation	4.75 mg/m3	Repeated dose toxicity
EDTA-tetrasodium salt	General population	Oral	25 mg/kg	Repeated dose toxicity
Product:	Workers	Inhalation	2.5 mg/m3	Repeated dose toxicity
	General population	Inhalation	1.5 mg/m3	Repeated dose toxicity
Specified substance(s)	General population	Inhalation	1.5 mg/m3	Repeated dose toxicity

	Workers	Inhalation	2.5 mg/m3	Repeated dose toxicity
sodium hydroxide	Workers	Inhalation	1 mg/m3	Irritating to respiratory system.
	General population	Inhalation	1 mg/m3	Irritating to respiratory system.

PNEC-Values

Critical component	Environmental compartment		Remarks
Potassium sulphite	Aquatic (freshwater)	1.67 mg/l	
	Aquatic (marine water)	0.17 mg/l	
	Sewage treatment plant	125.5 mg/l	
Sodium sulphite	Aquatic (marine water)	0.13 mg/l	
	Aquatic (freshwater)	1.33 mg/l	
	Sewage treatment plant	99.9 mg/l	
Sodium bromide	Aquatic (freshwater)	0.15 mg/l	
	Aquatic (intermit. releases)	0.208 mg/l	
	Aquatic	0.12 mg/kg	
	Sewage treatment plant	100 mg/l	
	Predator	3.33333 mg/kg	
	Aquatic (marine water)	0.075 mg/l	
	Aquatic	0.06 mg/kg	
	soil	3.2 mg/kg	
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	

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:	Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. 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:	Colorless, Pale yellow
Odor:	Odorless
Odor Threshold:	No data available.
pH:	10.8 (25 °C)
Freezing point:	< 0 °C (Literature.)
Boiling Point:	> 100 °C (Literature.)
Flash Point:	> 100 °C
Evaporation Rate:	No data available.
Flammability (solid, gas):	Not flammable.
Flammability Limit - Upper (%):	No data available.
Flammability Limit - Lower (%):	No data available.
Vapor pressure:	Not applicable
Vapor density (air=1):	No data available.
Relative density:	1.241 (20 °C) (Literature.)
Solubility(ies)	
Solubility in Water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Autoignition Temperature:	No data available.
Decomposition Temperature:	No data available.
Viscosity:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.

9.2 Other information

VOC Content:

EC Directive 2004/42: 61 g/l ~6.1 % (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:** Reacts violently with strong acids.
- 10.4 Conditions to avoid:** Avoid heat or contamination. Strong acids. Strong oxidizing agents.
- 10.5 Incompatible Materials:** No data available.
- 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.
- Ingestion:** May be ingested by accident. Ingestion may cause irritation and malaise.
- Skin Contact:** May cause an allergic skin reaction.
- Eye contact:** Eye contact is possible and should be avoided. Causes serious eye damage.

11.1 Information on toxicological effects

Acute toxicity

Oral

Product: ATEmix: 7,370.1 mg/kg

Specified substance(s)

Potassium carbonate LD 50 (Rat): > 2,000 mg/kg

Hydroquinone LD 50 (Rat): 367.3 mg/kg

Sodium bromide LD 50 (Rat): 4,200 mg/kg
LD50 (rat): 3,500 mg/kg

1-Phenyl-3-pyrazolidone LD 50 (Rat): 200 mg/kg

1-Phenyltetrazole-5-thiol LD 50 (Rat): > 5,000 mg/kg

Dermal

Product: ATEmix: 18,750 mg/kg

Specified substance(s)

Potassium carbonate LD 50 (Rabbit): > 2,000 mg/kg

Hydroquinone LD 50 (Rat): > 900 mg/kg

Sodium bromide LD 50 (Rabbit): > 2,000 mg/kg
 LD50 (rabbit): > 2,000 mg/kg

1-Phenyl-3-pyrazolidone LD 50 (Guinea Pig): > 1,000 mg/kg

1-Phenyltetrazole-5-thiol 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

Hydroquinone No data available.

Sodium bromide No data available.

1-Phenyl-3-pyrazolidone No data available.

1-Phenyltetrazole-5-thiol No data available.

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

Hydroquinone NOAEL (Rat(Female), Dermal, 13 Weeks): 109.6 mg/kg
 NOAEL (Rat(Male), Dermal, 13 Weeks): 73.9 mg/kg
 NOAEL (Rat(Female, Male), Dermal, 14 d): 3,840 mg/kg
 NOAEL (Mouse(Female, Male), Dermal, 14 d): 4,800 mg/kg
 NOAEL (Rat(Female, Male), Oral, 13 Weeks): 50 mg/kg

Sodium bromide LOAEL (Rat(Female, Male), Oral, 13 Weeks): 225 mg/kg
 NOAEL (Rat(Female), Oral, 13 Weeks): 100 mg/kg

1-Phenyl-3-pyrazolidone No data available.

1-Phenyltetrazole-5-thiol No data available.

Skin Corrosion/Irritation:

Product: No data available.

Specified substance(s)

Specified substance(s)

Potassium carbonate	Irritating
Hydroquinone	in vivo (Rabbit): Not irritant Experimental result, Weight of Evidence study
Sodium bromide	in vivo (Rabbit): Not irritating
1-Phenyl-3-pyrazolidone	No data available.
1-Phenyltetrazole-5-thiol	No data available.

Serious Eye Damage/Eye Irritation:

Product: No data available.

Specified substance(s)

Potassium carbonate	Irritating
Hydroquinone	No data available.
Sodium bromide	in vivo (Rabbit, 24 - 72 hrs): Slightly irritating EU
1-Phenyl-3-pyrazolidone	Contact with eyes may cause irritation.
1-Phenyltetrazole-5-thiol	Causes serious eye irritation.

Respiratory or Skin Sensitization:

Product: No data available.

Specified substance(s)

Potassium carbonate	No data available.
Hydroquinone	No data available.
Sodium bromide	No data available.
1-Phenyl-3-pyrazolidone	Prolonged or repeated contact may cause skin sensitization in susceptible individuals.
1-Phenyltetrazole-5-thiol	No data available.

Germ Cell Mutagenicity

In vitro

Product: No data available.

Specified substance(s)

Potassium carbonate	No data available.
Hydroquinone	No data available.
Sodium bromide	No data available.
1-Phenyl-3-pyrazolidone	No data available.
1-Phenyltetrazole-5-thiol	No data available.

In vivo

Product: No data available.

Specified substance(s)

Potassium carbonate	No data available.
Hydroquinone	No data available.
Sodium bromide	No data available.
1-Phenyl-3-pyrazolidone	No data available. 1-
Phenyltetrazole-5-thiol	No data available.

Carcinogenicity

Product: Suspected of causing cancer.

Specified substance(s)

Potassium carbonate	No data available.
Hydroquinone	No data available.
Sodium bromide	No data available.
1-Phenyl-3-pyrazolidone	No data available. 1-
Phenyltetrazole-5-thiol	No data available.

Reproductive toxicity

Product: No data available.

Specified substance(s)

Potassium carbonate	No data available.
Hydroquinone	No data available.
Sodium bromide	No data available.
1-Phenyl-3-pyrazolidone	No data available. 1-
Phenyltetrazole-5-thiol	No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specified substance(s)

Potassium carbonate	No data available.
Hydroquinone	No data available.
Sodium bromide	No data available.
1-Phenyl-3-pyrazolidone	No data available. 1-
Phenyltetrazole-5-thiol	No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Specified substance(s)

Potassium carbonate	No data available.
Hydroquinone	No data available.
Sodium bromide	No data available.
1-Phenyl-3-pyrazolidone	No data available. 1-
Phenyltetrazole-5-thiol	No data available.

Aspiration Hazard

Product: No data available.

Specified substance(s)

Potassium carbonate	No data available.
Hydroquinone	No data available.
Sodium bromide	No data available.
1-Phenyl-3-pyrazolidone	No data available. 1-
Phenyltetrazole-5-thiol	No data available.

SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

Fish

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

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
Hydroquinone	LC 50 (Oncorhynchus mykiss, 96 h): 0.638 mg/l (flow-through) Experimental result, Key study
Sodium bromide	NOAEL (Lepomis macrochirus, 96 h): >= 1,000 mg/l (Static) experimental result LC50 (Lepomis macrochirus (bluegill sunfish), 96 h): > 1,000 mg/l
1-Phenyl-3-pyrazolidone	LC 50 (Fathead minnow (Pimephales promelas), 96 h): 1 - 10 mg/l
1-Phenyltetrazole-5-thiol	LC 0 (Zebra danio (Danio rerio), 24 h): 10,000 mg/l

Aquatic Invertebrates

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

Specified substance(s)

Potassium carbonate	EC 50 (48 h): 200 mg/l (Static) experimental result NOAEL (48 h): 120 mg/l (Static) experimental result
Hydroquinone	EC 50 (Daphnia magna, 48 h): 0.134 mg/l (semi-static) Experimental result, Key study
Sodium bromide	EC 50 (48 h): >= 1,000 mg/l (Static) experimental result EC50 (Daphnia magna (water flea), 48 h): > 1,000 mg/l NOAEL (48 h): 5.2 g/l (Static) experimental result
1-Phenyl-3-pyrazolidone	EC 50 (Water flea (Daphnia magna), 96 h): 10 mg/l
1-Phenyltetrazole-5-thiol	No data available.

Chronic Toxicity

Fish

Product: No data available.

Specified substance(s)

Potassium carbonate	No data available.
Hydroquinone	No data available.
Sodium bromide	LC 50 (Poecilia reticulata): 180 - 225 mg/l experimental result

NOAEL (Poecilia reticulata): 10 - 100 mg/l experimental result

LOAEL (Oryzias latipes): <= 180 mg/l experimental result

1-Phenyl-3-pyrazolidone No data available. 1-

Phenyltetrazole-5-thiol No data available.

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

Potassium carbonate No data available.

Hydroquinone No data available.

Sodium bromide No data available.

1-Phenyl-3-pyrazolidone No data available. 1-

Phenyltetrazole-5-thiol No data available.

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s)

Potassium carbonate No data available.

Hydroquinone No data available.

Sodium bromide No data available.

1-Phenyl-3-pyrazolidone EC0 (Green algae (Selenastrum capricornutum), 48 h): 10 mg/l

1-Phenyltetrazole-5-thiol No data available.

12.2 Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s)

Potassium carbonate No data available.

Hydroquinone No data available.

Sodium bromide No data available.

1-Phenyl-3-pyrazolidone No data available. 1-

Phenyltetrazole-5-thiol No data available.

BOD/COD Ratio

Product No data available.

Specified substance(s)

Potassium carbonate No data available.

Hydroquinone No data available.

Sodium bromide No data available.

1-Phenyl-3-pyrazolidone No data available. 1-

Phenyltetrazole-5-thiol No data available.

12.3 Bioaccumulative potential

Product: No data available.

Specified substance(s)

Potassium carbonate	No data available.
Hydroquinone	No data available.
Sodium bromide	No data available.
1-Phenyl-3-pyrazolidone	No data available.
1-Phenyltetrazole-5-thiol	No data available.

12.4 Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Potassium carbonate	No data available.
Hydroquinone	No data available.
Sodium bromide	No data available.
1-Phenyl-3-pyrazolidone	No data available.
1-Phenyltetrazole-5-thiol	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.
Hydroquinone	No data available.
Sodium bromide	No data available.
1-Phenyl-3-pyrazolidone	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.

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

SECTION 14: Transport information

ADR

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

RID

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

IMDG

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

IATA

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

14.7 Transport in bulk according to Annex II of 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:

Chemical name	CAS-No.	Concentration
1-Phenyl-3-pyrazolidone	92-43-3	0.1 - 1.0%

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
EDTA-tetrasodium salt	64-02-8	0.1 - 1.0%
sodium hydroxide	1310-73-2	0.1 - 1.0%
1-Phenyl-3-pyrazolidone	92-43-3	0.1 - 1.0%

**15.2 Chemical safety
assessment:**

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Revision Information: Not relevant. Not relevant.

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

Wording of the H-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.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

Training information: No data available.

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

Eye Dam. 1, H318
Skin Sens. 1, H317
Muta. 2, H341
Carc. 2, H351

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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.