

Product Name: F8158

Revision Date: 11-Mar-2020 Issuing Date: 15-Nov-2019 Revision Number: 2 Safety data sheet number: GCX-4P4

Section 1: Identification of	the substance/mixture and of the company/undertaking
1.1. Product identifier	
Product Name	F8158
Product Form	Mixture
Safety data sheet number	GCX-4P4
1.2. Relevant identified uses of the	substance or mixture and uses advised against
Relevant identified uses	Pretreatment agent for water-based ink jet ink
Uses advised against	No information available
1.3. Details of the supplier of the sa	afety data sheet
<u>Manufacturer</u>	Brother Industries, Ltd. 15-1 Naeshiro-cho, Mizuho-ku, Nagoya 467-8561, Japan Telephone (for information): +81-52-824-2735
Importer .	 (USA) Brother International Corporation 200 Crossing Boulevard, Bridgewater, NJ 08807, USA Telephone (for information): +1-877-276-8437 (Europe) Brother Internationale Industriemaschinen GmbH Dusseldorfer Str. 7-9, D-46446, Emmerich, am Rhein, Germany Telephone (for information): +49-2-822-6090 (Australia) Brother International (Aust.) Pty. Ltd. ACN 001 393 835 Level 3, Building A, 11 Talavera Road, Macquarie Park, NSW 2113, Australia Telephone (for information): +61-2-9887-4344 (New Zealand) BROTHER INTERNATIONAL (NZ) LTD. 27 Matarawa Place, Tauriko Business Estate, Tauriko, Tauranga, New Zealand Telephone (for information): +64-7-543-5600 (Singapore) BROTHER INTERNATIONAL SINGAPORE PTE. LTD. 10 Euros Road 8, #14-01/02 Singapore Post Centre, Singapore 408600, Singapore Telephone (for information): +65-6538-0311 (Asia) BROTHER MACHINERY ASIA LTD. Unit 1207-11, 12/F, 9 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong Telephone (for information): +852-2777-0010 (China) BROTHER MACHINERY SHANGHAI LTD. moom 01, 5/F., No.799, West Tianshan Rd., ChangNing District, Shanghai 200335, P.R.China Telephone (for information): +86-21-2225-6666



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For further information, please contact

E-mail address

sds.info@brother.co.jp

1.4. Emergency telephone number

Emergency Telephone

CHEMTREC +1-703-527-3887 (International) CHEMTREC +1-800-424-9300 (North America) CHEMTREC +61-290372994 (Australia)

Section 2: Hazard(s) identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

2.2. Label elements

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

EUH208 - Contains 1,2-Benzisothiazolin-3-one May produce an allergic reaction.

2.3. Other hazards

No information available

Section 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	CAS No	EC No	EC Index No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
Water	7732-18-5	231-791-2	-	50-60	Not classified	No data available
Diethylene glycol	111-46-6	203-872-2	603-140-00-6	10-20	Acute Tox. 4 (H302)	No data available
Calcium Nitrate	10124-37-5	233-332-1	-	10-20	Not classified	No data available
Calcium chloride	10043-52-4	233-140-8	017-013-00-2	1-5	Eye Irrit. 2 (H319)	No data available



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1,2-Benzisothiazolin-3-one	2634-33-5	220-120-9	613-088-00-6	< 0.05	Acute Tox. 4	No data
					(H302)	available
					Skin Irrit. 2	
					(H315)	
					Eye Dam. 1	
					(H318)	
					Skin Sens. 1	
					(H317)	
					Aquatic Acute 1	
					(H400)	

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Full text of H- and EUH-phrases: see section 16

Section 4: First aid measures

4.1. Description of first aid measures

General advice	Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.		
Inhalation	Remove to fresh air. If symptoms persist, call a physician. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.		
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.		
Skin contact:	Wash off immediately with soap and plenty of water for at least 15 minutes. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water. Get medical attention if irritation develops and persists.		
Ingestion	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Get medical attention.		
4.2. Most important symptoms a	nd effects, both acute and delayed		
Symptoms	No information available		
4.3. Indication of any immediate medical attention and special treatment needed			
Note to physicians	Treat symptomatically.		

5.1. Extinguishing media	
Suitable Extinguishing Media	Not applicable.
Unsuitable extinguishing media	Not applicable.



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5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	In the event of fire and/or explosion do not breathe fumes May cause sensitization by inhalation and skin contact Thermal decomposition can lead to release of irritating gases and vapors
5.3. Advice for firefighters	

Special protective equipment for No information available. fire-fighters

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Use personal protective equipment as required. Avoid contact with skin, eyes and inhalation of vapors. Evacuate personnel to safe areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wash thoroughly after handling.
For emergency responders	Use personal protection recommended in Section 8.
6.2. Environmental precautions	
Environmental precautions	Prevent entry into waterways, sewers, basements or confined areas Do not flush into surface water or sanitary sewer system See Section 12 for additional Ecological Information Dispose of contents/container to an approved waste disposal plant Avoid release to the environment Collect spillage
6.3. Methods and material for contai	nment and cleaning up
Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. After cleaning, flush away traces with water. Prevent product from entering drains. Dam up.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.
6.4. Reference to other sections	
Reference to other sections	See section 8 for more information. See section 13 for more information.

Section 7: Handling and storage

7.1. Precautions for safe handling



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Advice on safe handling	Ensure adequate ventilation, especially in confined areas. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Do not breathe dust/fume/gas/mist/vapors/spray. Wash contaminated clothing before reuse. Wash hands thoroughly after handling. Burn or dispose of the wiping cloths used to clean up the product at once.
General hygiene considerations	When using do not eat, drink or smoke. Wash contaminated clothing before reuse.
7.2. Conditions for safe storage, inc	luding any incompatibilities
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep/store only in original container.
7.3. Specific end use(s)	
Specific use(s)	The information required is contained in this Safety Data Sheet

Section 8: Exposure controls and personal protection

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8.1. Control parameters

Exposure Limits

Chemical name	European Union	United Kingdom	France	Spain	Germany
Diethylene glycol	-	TWA: 23 ppm	-	-	TWA: 10 ppm
111-46-6		TWA: 101 mg/m ³			TWA: 44 mg/m ³
		STEL: 69 ppm			
		STEL: 303 mg/m ³			
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Diethylene glycol	-	-	-	-	TWA: 2.5 ppm
111-46-6					TWA: 11 mg/m ³
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Diethylene glycol	TWA: 10 ppm	TWA: 10 ppm	TWA: 10 mg/m ³	-	TWA: 23 ppm
111-46-6	TWA: 44 mg/m ³	TWA: 44 mg/m ³	-		TWA: 100 mg/m ³
	STEL 40 ppm	STEL: 40 ppm			STEL: 69 ppm
	STEL 176 mg/m ³	STEL: 176 mg/m ³			STEL: 300 mg/m ³

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration No information available. (PNEC)

8.2. Exposure controls

Appropriate engineering controls No information available.



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Personal protective equipment	Not normally required. For use other than in normal operating procedures (such as in the event of large spill), the
	following should be applied:
Eye/face protection	Tight sealing safety goggles. Wear safety glasses with side shields (or goggles).
Hand protection	Protective gloves.
Skin and body protection	Wear suitable protective clothing. Protective shoes or boots.
Respiratory protection	Not normally required.
Environmental exposure controls	Do not allow into any sewer, on the ground or into any body of water.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Physical state Color Odor Odor threshold	Liquid white Slight. No information available	
Property_	Values	Remarks • Method
pH	5-7	
Melting point / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	1.0-1.2(25°C)	
Water solubility	Soluble in water	
Solubility(ies)	Insoluble in solvents	
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive properties	No information available	No information available.
Oxidizing properties	No information available	
9.2. Other information		



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Section 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

No information available

10.5. Incompatible materials

Reference to other sections; 7

10.6. Hazardous decomposition products

No information available

Section 11: Toxicological information

11.1. Information on toxicological effects

Product Information

Inhalation	Reference to other sections; 4
Eye contact	Reference to other sections; 4
Skin contact:	Reference to other sections; 4
Ingestion	Reference to other sections; 4

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) ATEmix (dermal)	2,527.20 mg/kg 31,055.80 mg/kg
Skin corrosion/irritation	No information available
Serious eye damage/eye irritation	No information available
Respiratory or skin sensitization	No information available



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Germ cell mutagenicity	No information available
Carcinogenicity	No information available
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity .

Contains 0 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Diethylene glycol	-	75200: 96 h Pimephales	EC50 = 29228 mg/L 15	84000: 48 h Daphnia
		promelas mg/L LC50	min	magna mg/L EC50
		flow-through		
Calcium Nitrate	-	10000: 96 h Lepomis	-	2355: 120 h Daphnia
		macrochirus mg/L LC50		magna mg/L LC50
		static		
Calcium chloride	-	10650: 96 h Lepomis	-	2280000 - 3948000: 48 h
		macrochirus mg/L LC50		Daphnia magna µg/L
		static		LC50

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

Component Information

Chemical name	Partition coefficient
Diethylene glycol	-1.98
1,2-Benzisothiazolin-3-one	1.3

12.4. Mobility in soil

No information available.



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12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

No information available.

Section 13: Disposal considerations

13.1. Waste treatment methods

Should not be released into the environment. Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging	Improper disposal or reuse of this container may be dangerous and illegal.
Other Information	Waste codes should be assigned by the user based on the application for which the product was used. Store in a tightly sealed drum to prevent the spillage of the content

Section 14: Transport information

IMDG

Not a	pplicable UN/ID no	Not applicable
14.2	Proper shipping name	Not regulated
14.3	Hazard Class	Not regulated
14.4	Packing group	Not regulated
14.5	Marine pollutant	Not applicable
14.6	Special Provisions	None
14.7 Transport in bulk according to No information available		
Annex II of MARPOL 73/78 and the		
IBC Code		

RID

Not applicable UN/ID no	Not applicable
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None
<u>ADR</u> 14.1 UN/ID no	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None



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IATA

Not a	pplicable UN/ID no	Not regulated
14.2	Proper shipping name	Not regulated
14.3	Hazard Class	Not regulated
14.4	Packing group	Not regulated
14.5	Environmental hazard	Not applicable
14.6	Special Provisions	None

Section 15: Regulatory information

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

EU-Regulations

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

* Contains no substances listed in REACH Regulation (EC) No.1907/2006 ANNEX XVII.

- * Contains no substance listed in REACH Regulation (EC) No.1907/2006 Candidate List for Authorization.
- * Contains no substances listed in REACH Regulation (EC) No.1907/2006 ANNEX XIV.

National Regulations

No information available

15.2. Chemical safety assessment

No information available

Section 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

- 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
- H400 Very toxic to aquatic life

Legend

SVHC: Substances of Very High Concern for Authorization: TWA TWA (time-weighted average) ** Trade secret

STEL

STEL (Short Term Exposure Limit)

Key literature references and sources for data LOLI Database (ChemADVISOR, Inc.)

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Revision Note No information available

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information relates only to this product. It may not be valid, if used in combination with any other materials or in any other process, and it is based on our best knowledge as of the date of preparation (revision).