

Product Name: GCX-4P, GCX-4P05, GCX-4P20, GCX-4P2H

Revision date: 13-Dec-2024

Issuing Date: 01-Jun-2017

Revision Number: 8

Safety data sheet number: GCX-4P

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

1.1. Product identifier

Safety data sheet number GCX-4P

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Other means of identification

Unique Formula Identifier (UFI) K3U0-10N9-100E-XAU8

Pure substance/mixture Mixture

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

Recommended use Pretreatment agent for water-based ink jet ink

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Brother Industries, Ltd.
15-1 Naeshiro-cho, Mizuho-ku, Nagoya 467-8561, Japan
Telephone (for information): +81-52-824-2735

Supplier

(Europe)
Brother Internationale Industriemaschinen GmbH
Dusseldorfer Str. 7-9, D-46446, Emmerich, am Rhein, Germany
Telephone (for information): +49-2-822-6090

(Asia)

BROTHER MACHINERY ASIA LTD.
17/F., Fugro House-KCC 2, No.1 Kwai On Road, Kwai Chung, New Territories, Hong Kong SAR
Telephone (for information): +852-2777-0010

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)

Emergency Telephone

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Austria	01 406 43 43
Belgium	070 245 245
Bulgaria	+359 2 9154 233
Croatia	+3851 2348 342
Cyprus	1401
Czech Republic	+420 224 919 293 +420 224 915 402
Denmark	+45 8212 1212
Estonia	112 16662 (+372) 7943 794
Finland	0800 147 111 +358 (0)9 471 977
France	+ 33 (0)1 45 42 59 59 (ORFILA number INRS)
Germany	CHEMTREC: 0800 1817059
Greece	(0030) 2107793777 Emergency Telephone Poisoning Center Aglaia Kyriakou Children's Hospital
Hungary	+36-80-201-199
Ireland	+353 (0)1 809 2166– public poisons information line
Italy	https://preparatipericolosi.iss.it/cav.aspx
Latvia	+371 67042473
Lichtenstein	01 406 43 43
Lithuania	(8 - 5) 236 20 52
Luxembourg	(+352) 8002 5500
Malta	112
Netherlands	088 755 8000 Only for the purpose of informing medical personnel in case of acute intoxications.
Norway	22 59 13 00
Poland	CHEMTREC: +48 22 398 80 29
Portugal	+351 800 250 250
Romania	+40 21 599 2300 021 112
Slovakia	+421 2 5477 4166
Slovenia	112
Spain	+ 34 91 562 04 20
Sweden	112 – ask for poisons information
Switzerland	145 (Swiss local number) +41 44 251 51 51 (International number)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin sensitization	Category 1A - (H317)
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2.2. Label elements

Contains 1,2-benzisothiazol-3(2H)-one

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Signal word

Warning

Hazard statements

H317 - May cause an allergic skin reaction

Precautionary Statements - EU (§28, 1272/2008)

P261 - Avoid breathing mist.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P280 - Wear protective gloves and eye protection.

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.

P362 + P364 - Take off contaminated clothing and wash it before reuse.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.

Unknown acute toxicity

15 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

53.8 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

53.8 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).

18.8 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Unknown aquatic toxicity

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

2.3. Other hazards

PBT and vPvB assessment

This product contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

This product contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	CAS No.	EC No (EU)	Weight-%	Classification	Specific	M-Factor	M-Factor	REACH
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		Index No)		according to Regulation (EC) No. 1272/2008 [CLP]	concentration limit (SCL)		(long-term)	registration number
Water	7732-18-5	231-791-2	35-60	No data available	-	-	-	Not applicable
Diethylene glycol	111-46-6	203-872-2 (603-140-00-6)	30-40	Acute Tox. 4 (H302)	-	-	-	Not applicable
Calcium Nitrate	10124-37-5	233-332-1	10-20	Acute Tox. 4 (H302) Eye Irrit. 2 (H319)	-	-	-	01-2119495093-35-xxxx
Calcium chloride	10043-52-4	233-140-8 (017-013-00-2)	1-5	Eye Irrit. 2 (H319)	-	-	-	Not applicable
1,2-benzisothiazol-3(2H)-one	2634-33-5	220-120-9 (613-088-00-6)	<0.1	Acute Tox. 2 (H330) Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1A (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	Skin Sens. 1A :: C>=0.036%	1	1	Not applicable

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

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Water 7732-18-5	89838.9	No data available	No data available	No data available	No data available
Diethylene glycol 111-46-6	12565	11890	4.6	No data available	No data available
Calcium Nitrate 10124-37-5	302	No data available	No data available	No data available	No data available
Calcium chloride 10043-52-4	1000	5000	No data available	No data available	No data available

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Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
1,2-benzisothiazol-3(2H)-one 2634-33-5	450	2000	0.21	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.
Eye contact	In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical advice/attention.
Skin contact:	Take off immediately all contaminated clothing. Wash off immediately with soap and plenty of water. If skin irritation or rash occurs: Get medical advice/attention. May cause an allergic skin reaction.
Ingestion	Do NOT induce vomiting Obtain immediate medical attention. Wash out mouth with water and give 100-200 ml of water to drink.
Self-protection of the first aider	No information available.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms	Inhalation : May be harmful if inhaled Skin contact: May cause allergic skin reaction Eye contact : Causes serious eye damage Ingestion : May be harmful if swallowed Itching Rashes Hives
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4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians	May cause sensitization in susceptible persons. Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

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Suitable Extinguishing Media Dry chemical, CO₂, water spray or regular foam

Unsuitable extinguishing media None.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical Fire hazard : Not flammable
Product is or contains a sensitizer May cause sensitization by skin contact

Hazardous combustion products Fire may produce irritating, corrosive and/or toxic gases. Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides (NO_x).

5.3. Advice for firefighters

Special protective equipment for fire-fighters Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Avoid contact with eyes, skin and clothing Avoid breathing vapors or mists Ensure adequate ventilation

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Avoid release to the environment. Prevent substance entering sewers. Washings must be prevented from entering surface water drains.

6.3. Methods and material for containment and cleaning up

Methods for containment Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Wipe up with absorbent towel Wash with water to remove remaining traces of ink.

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

Avoid contact with eyes, skin and clothing. Ensure adequate ventilation. Avoid breathing vapors or mists. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place. Keep away from oxidizing agents. Do not freeze. Keep out of the reach of children.

7.3. Specific end use(s)

Specific use(s)

Pretreatment agent for water-based ink jet ink.

Risk Management Methods (RMM)

The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Diethylene glycol 111-46-6	-	TWA: 10 ppm TWA: 44 mg/m ³ STEL 40 ppm STEL 176 mg/m ³	-	TWA: 10 mg/m ³	TWA: 23 ppm TWA: 101 mg/m ³
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Diethylene glycol 111-46-6	-	-	TWA: 2.5 ppm TWA: 11 mg/m ³ STEL: 5 ppm STEL: 22 mg/m ³	TWA: 10 ppm TWA: 45 mg/m ³ STEL: 20 ppm STEL: 90 mg/m ³ A*	-
Calcium chloride 10043-52-4	-	TWA: 5 mg/m ³ Ceiling: 4 mg/m ³	-	-	-
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
Diethylene glycol 111-46-6	-	TWA: 10 ppm TWA: 44 mg/m ³	TWA: 10 ppm TWA: 44 mg/m ³ Peak: 40 ppm Peak: 176 mg/m ³	-	-
1,2-benzisothiazol-3(2H)- one 2634-33-5	-	-	skin sensitizer	-	-
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Diethylene glycol	TWA: 23 ppm	-	-	TWA: 10 mg/m ³	O*

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111-46-6	TWA: 100 mg/m ³ STEL: 69 ppm STEL: 300 mg/m ³				TWA: 10 ppm TWA: 45 mg/m ³ STEL: 20 ppm STEL: 90 mg/m ³
Calcium chloride 10043-52-4	-	-	-	TWA: 2 mg/m ³	-
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Diethylene glycol 111-46-6	-	-	-	-	TWA: 10 mg/m ³
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Diethylene glycol 111-46-6	-	TWA: 115 ppm TWA: 500 mg/m ³ STEL: 184 ppm STEL: 800 mg/m ³	TWA: 10 ppm TWA: 44 mg/m ³ Ceiling: 90 mg/m ³	TWA: 10 ppm TWA: 44 mg/m ³ STEL: 40 ppm STEL: 176 mg/m ³	-
Chemical name	Sweden		Switzerland		United Kingdom
Diethylene glycol 111-46-6	NGV: 10 ppm NGV: 45 mg/m ³ Vägledande KGV: 20 ppm Vägledande KGV: 90 mg/m ³ H*		TWA: 10 ppm TWA: 44 mg/m ³ STEL: 40 ppm STEL: 176 mg/m ³		TWA: 23 ppm TWA: 101 mg/m ³ STEL: 69 ppm STEL: 303 mg/m ³

Biological occupational exposure limits This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers No information available

Derived No Effect Level (DNEL) - General Public No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Appropriate engineering controls Good general ventilation should be sufficient under normal use.

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 Wear safety glasses with side shields (or goggles)

Hand protection Protective gloves

Skin and body protection Long sleeved clothing and long pants

Respiratory protection In case of large spillages: Wear suitable respiratory protective equipment.

Thermal hazards No information available.

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General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid	
Appearance		
Color	white opaque	
Odor	Slight	
Odor threshold	No information available	
Property	Values	Remarks • Method
Melting point / freezing point	No information available	
Initial boiling point and boiling range	No information available	
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	> 93.3 °C	
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
pH	5 - 7	
pH (as aqueous solution)	No data available	
Kinematic viscosity	No data available	None known
Dynamic viscosity	No information available	
Water solubility	Miscible in water	
Solubility(ies)	No information available	
Partition coefficient	No data available	None known
Vapor pressure	No data available	None known
Relative density	1.1 - 1.3	@25°C (H ₂ O=1)
Bulk density	No data available	
Liquid Density	No data available	
Relative vapor density	No data available	None known
Particle characteristics		
Particle Size	No data available	
Particle Size Distribution	No data available	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Explosives	
Explosive properties	Not explosive
Oxidizing properties	No information available

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9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity**10.1. Reactivity****Reactivity** No information available.**10.2. Chemical stability****Stability** Stable under normal conditions.**Explosion data****Sensitivity to mechanical impact** None.**Sensitivity to static discharge** None.**10.3. Possibility of hazardous reactions****Possibility of hazardous reactions** No information available.**10.4. Conditions to avoid****Conditions to avoid** Protect from direct sunlight.**10.5. Incompatible materials****Incompatible materials** Strong acids, Strong bases**10.6. Hazardous decomposition products****Hazardous decomposition products** Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x)**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Information on likely routes of exposure****Product Information****Inhalation** No information available**Eye contact** Not classified (OECD 438 method)**Skin contact** May cause allergic skin reaction.**Ingestion** Acute LD₅₀ > 2000 mg/kg (OECD 420 method)**Symptoms related to the physical, chemical and toxicological characteristics**

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Symptoms Itching. Rashes. Hives.

Acute toxicity

Numerical measures of toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water	> 90 mL/kg (Rat)	-	-
Diethylene glycol	= 12565 mg/kg (Rat)	= 11890 mg/kg (Rabbit)	> 4600 mg/m ³ (Rat) 4 h
Calcium Nitrate	= 302 mg/kg (Rat)	-	-
Calcium chloride	= 1000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
1,2-benzisothiazol-3(2H)-one	= 450 mg/kg (Rat)	> 2000 mg/kg (Rat)	0.21 mg/L

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Not classified
Based on available data, the classification criteria are not met
pH: 5 - 7

Serious eye damage/eye irritation Not classified (OECD 438 method)
pH: 5 - 7

Respiratory or skin sensitization Respiratory sensitization : Classification not possible
Skin sensitization : May cause an allergic skin reaction

Germ cell mutagenicity Not classified
Based on available data, the classification criteria are not met

Carcinogenicity Calcium nitrate: IARC (IARC Vol. 94 (2010)) has stated that there is inadequate evidence to suggest that nitrates in food and drinking water are carcinogenic to humans.
It also classified the carcinogenicity as 'Group 2A' under conditions where nitrates or nitrites can be nitrosated in vivo after oral ingestion

Other ingredients of this product have not been classified as carcinogens according to IARC monographs, NTP and OSHA
Classification not possible

Reproductive toxicity No information available

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STOT - single exposure Not classified
Based on available data, the classification criteria are not met

STOT - repeated exposure Not classified
Based on available data, the classification criteria are not met

Aspiration hazard No information available

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

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

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

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation Not likely to bioaccumulate.

Component Information

Chemical name	Partition coefficient
Diethylene glycol	-1.98
1,2-benzisothiazol-3(2H)-one	0.99

12.4. Mobility in soil

Mobility in soil No information available.

Mobility No information available.

12.5. Results of PBT and vPvB assessment

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PBT and vPvB assessment

This product contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

This product contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

Chemical name	PBT and vPvB assessment
Diethylene glycol	The substance is not PBT / vPvB
Calcium Nitrate	The substance is not PBT / vPvB
Calcium chloride	The substance is not PBT / vPvB
1,2-benzisothiazol-3(2H)-one	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with federal, state and local regulations.

SECTION 14: Transport information

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 applicable
14.6 Special precautions for user	
Special Provisions	None

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 applicable
14.6 Special precautions for user	
Special Provisions	None
14.7 Maritime transport in bulk according to IMO instruments	Not applicable

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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 applicable
14.6	Special precautions for user	
	Special Provisions	None

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 applicable
14.6	Special precautions for user	
	Special Provisions	None

SECTION 15: Regulatory information

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

National Regulations

France

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number
Diethylene glycol - 111-46-6	RG 84
1,2-benzisothiazol-3(2H)-one - 2634-33-5	RG 65

Germany

Water hazard class (WGK) slightly hazardous to water (WGK 1)

European Union

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.

Authorizations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
Diethylene glycol - 111-46-6	Use restricted. See entry 75.	-
Calcium chloride - 10043-52-4	Use restricted. See entry 75.	-
1,2-benzisothiazol-3(2H)-one - 2634-33-5	Use restricted. See entry 75.	-

Persistent Organic Pollutants

Not applicable

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Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
1,2-benzisothiazol-3(2H)-one - 2634-33-5	Product-type 2: Disinfectants and algaecides not intended for direct application to humans or animals Product-type 6: Preservatives for products during storage Product-type 9: Fiber, leather, rubber and polymerized materials preservatives Product-type 11: Preservatives for liquid-cooling and processing systems Product-type 12: Slimicides Product-type 13: Working or cutting fluid preservatives

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies
NZIoC	Complies

Legend:

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

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

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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
H330 - Fatal if inhaled
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorization:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
vPvB: Very Persistent and very Bioaccumulative (vPvB) Chemicals

Legend SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)
Ceiling Maximum limit value * Skin designation
+ Sensitizers

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapor	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	On basis of test data
Respiratory sensitization	Calculation method
Skin sensitization	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	On basis of test data
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Chronic aquatic toxicity	Calculation method
Acute aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals

Product Name: GCX-4P, GCX-4P05, GCX-4P20, GCX-4P2H

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Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

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Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Disclaimer

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End of Safety Data Sheet