

SAFETY DATA SHEET

AQUA PLUS

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

| 1.1 Product identifier | | |
|------------------------------------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------|
| Product code | : | KU405ACG01 |
| Product name | : | AQUA PLUS |
| 1.2 Relevant identified uses of t | he s | <u>ubstance or mixture and uses advised against</u> |
| Product use | : | Speciality chemicals for use in printing industry |
| Uses advised against | : | None known. |
| 1.3 Details of the supplier of the | safe | ety data sheet |
| Manufacturer / Distributor | | Flint Group, Print Media Europe, Varn House, Northbank Industrial Park, Irlam, Greater Manchester, M44 5BL England. |
| e-mail address of person responsible for this SDS | | MSDS.UnitedKingdom.Irlam.TM@flintgrp.com |
| 1.4 Emergency telephone numb | er (w | vith hours of operation) |

+44 (0) 333 333 9879 (8:00 h - 17:00 h)

<u>History</u>

| Date of printing Date of issue/ Date of revision | : 03.05.2017. : 03.04.2017. |
|--------------------------------------------------------|--------------------------------|
| Date of previous issue | : 31.03.2017. |
| Version | : 3.01 |

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

revision

Hazard pictograms

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|--------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Hazardous ingredients | Feaction mass of: 5-chloro-2-m 2-methyl-2H-isothiazol-3-one [l | ethyl-4-isothiazolin-3-one [EC no. 247-500-7] and EC no. 220-239-6] (3:1) |
| Supplemental label elements | Not applicable. | |
| Precautionary statements | P305 + P351 - IF IN EYES: Rir | or clothing and eye or face protection. ise cautiously with water for several minutes. , if present and easy to do. Continue rinsing. |
| Hazard statements | H319 - Causes serious eye irrit H317 - May cause an allergic s | |
| Signal word | Warning | |

SECTION 2: Hazards identification

Annex XVII - Restrictions : Not applicable. on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

2.3 Other hazards

PBT

: P: Not available. B: Not available. T: Not available.

vPvB

vP: Not available. vB: Not available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

: Mixture

| Product/ingredient name | Identifiers | % | <u>Classification</u> Regulation (EC) No. 1272/2008 [CLP] | Туре |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| sotridecanol, ethoxylated | EC: 500-027-2 CAS: 9043-30-5 | <3 | Acute Tox. 4, H302 Eye Dam. 1, H318 | [1] |
| bronopol (INN) | REACH #: 01-2119980938-15 EC: 200-143-0 CAS: 52-51-7 Index: 603-085-00-8 | ≤0.3 | Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 2, H411 | [1] |
| reaction mass of: 5-chloro- 2-methyl-4-isothiazolin- 3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol- 3-one [EC no. 220-239-6] (3: 1) | CAS: 55965-84-9 Index: 613-167-00-5 | <0.06 | Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H311 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) | [1] |

See Section 16 for the full text of the H statements declared above.

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

<u>Type</u>

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

| : | In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice. |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| : | Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. |
| : | Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. |
| : | Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention/advice. |
| : | Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Give nothing by mouth. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |
| : | No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. |
| | : : : |

Use suitable protective equipment (section 8).

4.2 Most important symptoms and effects, both acute and delayed

See toxicological information (Section 11)

4.3 Indication of any immediate medical attention and special treatment needed

| Notes to physician | : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Specific treatments | : No specific treatment. |

SECTION 5: Firefighting measures

5.1 Extinguishing media

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|------------------------------------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Special protective equipment for fire-fighters | : | Fire-fighters should wear appropriate protective equipment and self-co breathing apparatus (SCBA) with a full face-piece operated in positive mode. Clothing for fire-fighters (including helmets, protective boots an conforming to European standard EN 469 will provide a basic level of for chemical incidents. | e pressure nd gloves) |
| Special protective actions for fire-fighters | : | Promptly isolate the scene by removing all persons from the vicinity of incident if there is a fire. No action shall be taken involving any person without suitable training. Do not release runoff from fire to drains or watercourses. | |
| 5.3 Advice for fire-fighters | | | |
| | | Decomposition products may include the following materials: carbon dioxide carbon monoxide | |
| Hazardous thermal decomposition products | : | Fire will produce dense black smoke. Exposure to decomposition proc cause a health hazard. | ducts may |
| Hazards from the substance or mixture | : | In a fire or if heated, a pressure increase will occur and the container | may burst. |
| 5.2 Special hazards arising from | <u>n the</u> | substance or mixture | |
| Extinguishing media not to be used | : | Do not use water jet. | |
| Suitable Extinguishing media | : | Recommended:, alcohol-resistant foam, CO_2 , powders, water spray | |

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

| For non-emergency personnel | : | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |
|-----------------------------|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| For emergency responders | : | If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |

6.2 Environmental precautions

Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.3 Methods and materials for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Preferably clean with a detergent. Avoid using solvents.

6.4 Reference to other sections

See Section 1 for emergency contact information. See Section 13 for additional waste treatment information. See Section 8 for information on appropriate personal protective equipment.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep container tightly closed. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Remove contaminated clothing and protective equipment before entering eating areas. Workers should wash hands and face before eating, drinking and smoking. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see Section 8). Always keep in containers made from the same material as the original one. Comply with the health and safety at work laws.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with all local, regional, national and international regulations.

Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10).

Observe label precautions. Keep container tightly closed and in a well-ventilated place.

Prevent unauthorized access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

Not applicable.

7.4 Additional information

Not applicable.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters **Occupational exposure** : Not applicable. limits **Other Exposure limits** : CMR: See toxicological information (Section 11) **Recommended monitoring** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness procedures of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 : 03.04.2017. Date of issue/Date of Page: 4/9 revision

SECTION 8: Exposure controls/personal protection

(Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available.

8.2 Exposure controls

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction.

| Individual protection measure | | |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| Respiratory protection | Not applicable. | |
| Body protection | Personal protective equipment for the body should be selected based on task being performed and the risks involved and should be approved by a specialist before handling this product. | |
| Hand protection | Chemical-resistant, impervious gloves complying with an approved stand should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. | lard |
| Gloves | For prolonged or repeated handling, use the following type of gloves: 4 - 8 hours polyethylene (PE) or Viton® Gloves. | |
| | References: http://www.esig.org/en/library/publications/best-practice-guid | les |
| Other skin protection | Appropriate footwear and any additional skin protection measures should selected based on the task being performed and the risks involved and s be approved by a specialist before handling this product. | |
| Eye/face protection | Use safety eyewear designed to protect against splash of liquids. | |
| Environmental exposure cont | | |

Do not allow to enter drains or watercourses.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| Appearance | | |
|--------------------------------|-------|-----------------------------------|
| Physical state | : | Liquid. |
| Color | : | Blue. |
| Odor | : | Characteristic. |
| Odor threshold | : | Not available. |
| рН | : | 6 to 7 |
| Melting point | : | Not available. |
| Boiling point | : | >= 100 °C |
| Flash point | : | Closed cup: > 100°C [theoretical] |
| Evaporation rate | : | Not available. |
| Flammability (solid, gas) | : | Not applicable. |
| Burning time | : | Not applicable. |
| Burning rate | : | Not applicable. |
| Explosion limits | | |
| Lower: | : | Not applicable. |
| Upper: | : | Not available. |
| Vapor pressure | : | < 23 hPa |
| Vapor density | : | Not available. |
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SECTION 9: Physical and chemical properties

| | Density | : | ~ 1 g/cm³ |
|-----------|--------------------------------------------|---|-------------------------------------|
| | Solubility | : | Soluble in water in any proportion. |
| | Partition coefficient: n- octanol/water | : | Not available. |
| | Auto-ignition temperature | : | Not available. |
| | Decomposition temperature | : | Not available. |
| | Viscosity | : | Not available. |
| | Explosive properties | : | Not available. |
| | Oxidizing properties | : | Not available. |
| <u>9.</u> | 2 Other information | | |
| | SADT | : | Not available. |

SECTION 10: Stability and reactivity

10.1 Reactivity

Not available.

10.2 Chemical stability

Stable under recommended storage and handling conditions (see Section 7).

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

When exposed to high temperatures may produce hazardous decomposition products.

10.5 Incompatible materials

Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids

10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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11.1 Information on toxicological effects

There are no data available on the mixture itself. The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended. See sections 2 and 3 for details.

Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in nonallergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage.

Substances / Mixtures

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------|-----------------------|----------|
| Fronopol (INN) reaction mass of: 5-chloro- 2-methyl-4-isothiazolin- 3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol- 3-one [EC no. 220-239-6] (3: 1) | LD50 Oral LD50 Oral | Rat Rat | 342 mg/kg 53 mg/kg | - |

Acute toxicity estimates

| Route | ATE value |
|-------|---------------|
| Oral | 25125.6 mg/kg |

Irritation/Corrosion

: Causes eye irritation.

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SECTION 11: Toxicological information

| Sensitization | : May produce an allergic reaction. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Mutagenicity | : Not available. |
| Carcinogenicity | : Not available. |
| Reproductive toxicity | : Not available. |

| Specific target organ toxicity (single exposure) | : | Not available. |
|-------------------------------------------------------|---|----------------|
| Specific target organ toxicity (repeated exposure) | : | Not available. |

| Aspiration hazard | : Not available. |
|-------------------|------------------|
| Chronic toxicity | : Not available. |
| Teratogenicity | : Not available. |
| Other information | |
| Toxicokinetics | |
| Absorption | : Not available. |
| Distribution | : Not available. |
| Metabolism | : Not available. |
| Elimination | : Not available. |

SECTION 12: Ecological information

There are no data available on the mixture itself. Do not empty into drains or watercourses. See Sections 2 and 3 for details.

12.1 Toxicity data

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|-----------------------------------------------------------|----------------------------------------------------------|---------------------|
| pronopol (INN) | Acute EC50 0.02 ppm Fresh water | Algae - Scenedesmus subspicatus | 96 hours |
| | Acute LC50 11.17 ppm Fresh water Chronic NOEC 1.94 ppm | Fish - Lepomis macrochirus Fish - Oncorhynchus mykiss | 96 hours 49 days |

12.2 Persistence/degradability

Not available.

12.3 Bioaccumulative potential

| Ī | Product/ingredient name | LogPow | BCF | Potential |
|---|-------------------------|--------|-----|-----------|
| | pronopol (INN) | 0.18 | - | low |

12.4 Mobility in soil

Not available.

12.5 Results of PBT and vPvB assessment

: P: Not available. B: Not available. T: Not available.

vPvB

PBT

: vP: Not available. vB: Not available.

12.6 Other adverse effects

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations.

SECTION 13: Disposal considerations

| Methods of disposal | : | The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. |
|---------------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hazardous waste | : | Yes. |

European waste catalogue (EWC)

| Waste code Waste designation | |
|------------------------------|--------------------------------------------|
| 07 07 01* | aqueous washing liquids and mother liquors |

SECTION 14: Transport information

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

International transport regulations

This product is not regulated for carriage according to ADR/RID, ADN, IMDG, ICAO/IATA.

| <u>14.1 UN number</u> | : | Not applicable. |
|------------------------------------------------------------------------------|---|-----------------|
| 14.2 Proper shipping name | : | Not applicable. |
| <u>14.3 Transport hazard class(es)</u> | : | Not applicable. |
| 14.4 Packing group | : | Not applicable. |
| 14.5 Environmental hazards | : | Not applicable. |
| 14.6 Special precautions for | : | Not applicable. |
| <u>user</u> | | |
| 14.7 Transport in bulk according to Annex II of MARPOL73/78 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 Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization Annex XIV None of the components are listed. Substances of very high concern None of the components are listed. Annex XVII - Restrictions on : Not applicable. the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : 🔀 0,1 % **VOC** content **Europe inventory** : All components are listed or exempted. **National regulations** Industrial use : The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work. 15.2 Chemical Safety Assessment

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AQUA PLUS

SECTION 15: Regulatory information

This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

CEPE MSDS Code

| Indicates information that | has changed from previously issued version. |
|----------------------------|----------------------------------------------------------|
| Abbreviations and | : ATE = Acute Toxicity Estimate |
| acronyms | CLP = Classification, Labelling and Packaging Regulation |

| acronyms | CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] |
|----------|---------------------------------------------------------------------------------------------|
| | DMEL = Derived Minimal Effect Level |
| | DNEL = Derived No Effect Level |
| | EUH statement = CLP-specific Hazard statement |
| | PBT = Persistent, Bioaccumulative and Toxic |
| | PNEC = Predicted No Effect Concentration |
| | RRN = REACH Registration Number |
| | vPvB = Very Persistent and Very Bioaccumulative |
| | |

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

| Classific | ation | Justification Calculation method Calculation method |
|------------------------------------------|----------------|---------------------------------------------------------|
| Eye Irrit. 2, H319 Skin Sens. 1, H317 | | |
| Full text of abbreviated H | : ⊮ 301 | Toxic if swallowed. |
| statements | H302 | Harmful if swallowed. |
| | H311 | Toxic in contact with skin. |
| | H312 | Harmful in contact with skin. |
| | H314 | Causes severe skin burns and eye damage. |
| | H315 | Causes skin irritation. |
| | H317 | May cause an allergic skin reaction. |
| | H318 | Causes serious eye damage. |
| | H319 | Causes serious eye irritation. |
| | H331 | Toxic if inhaled. |
| | H335 | May cause respiratory irritation. |
| | H400 | Very toxic to aquatic life. |
| | H410 | Very toxic to aquatic life with long lasting effects. |
| | H411 | Toxic to aquatic life with long lasting effects. |
| Date of printing | : 5/3/2017 | |
| Date of issue/ Date of revision | : 4/3/2017 | |
| Date of previous issue | : 3/31/2017 | |
| Version | : 3.01 | |

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.