SAFETY DATA SHEET



Hydro A

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

1.1 Product identifier

Product name : Hydro A

Other means of : Not available.
identification

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

Product use : Fertiliser.

1.3 Details of the supplier of the safety data sheet

Master Garden Nutrients Ltd Unit 6 & 7, Junction 2 Industrial Estate Demuth way, Oldbury B69 4LT United Kingdom

+44 (0) 121 7962 766 www.mastergardennutrients.co.uk sales@mgnutrients.co.uk

e-mail address of person

: Bram de Bont: bram@mgnutrients.co.uk

responsible for this SDS

1.4 Emergency telephone number

Supplier

Telephone number : +44 8708200418/+44 2038073798 (Chemtrec)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Eye Dam. 1, H318

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

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

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms



Signal word : Danger

Hazard statements: H318 - Causes serious eye damage.

Precautionary statements

General: P103 - Read carefully and follow instructions.

P102 - Keep out of reach of children.

P101 - If medical advice is needed, have product container or label at hand.

Prevention: P280 - Wear eye or face protection.

SECTION 2: Hazards identification

Response

: P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Storage
Disposal
Hazardous ingredients

: Not applicable.: Not applicable.

Supplemental label

: calcium nitrate

elements

: EUH208 - Contains reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Number 58 and 65.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification

: None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

| Product/ingredient name | Identifiers | % | Regulation (EC) No. 1272/2008 [CLP] | Туре |
|--|--|--|--|---------|
| calcium nitrate | EC: 233-332-1 CAS: 10124-37-5 | ≥10 - ≤25 | Acute Tox. 4, H302 Eye Dam. 1, H318 | [1] |
| ammonium nitrate | REACH #: 01-2119490981-27 EC: 229-347-8 CAS: 6484-52-2 | ≤3 | Ox. Sol. 3, H272 Eye Irrit. 2, H319 | [1] |
| nitric acid | EC: 231-714-2 CAS: 7697-37-2 Index: 007-004-00-1 | ≤0.1 Ox. Liq. 2, H272 Skin Corr. 1A, H314 Eye Dam. 1, H318 EUH071 | | [1] [2] |
| bronopol (INN) | EC: 200-143-0 CAS: 52-51-7 Index: 603-085-00-8 | ≤0.1 | 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 | <0.001 | Acute Tox. 3, H301 Acute Tox. 2, H310 Acute Tox. 2, H330 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100) EUH071 | [1] |
| | | | See Section 16 for the full text of the H statements declared above. | |

SECTION 3: Composition/information on ingredients

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.

Type

- [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
- [6] Additional disclosure due to company policy

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact

: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Inhalation

: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact

Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. 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. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. 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.

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Over-exposure signs/symptoms

SECTION 4: First aid measures

Eye contact : Adverse symptoms may include the following:

> pain watering redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:

> pain or irritation redness

blistering may occur

Ingestion : Adverse symptoms may include the following:

stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

: In case of inhalation of decomposition products in a fire, symptoms may be delayed. Notes to physician

The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing

media

: Use dry chemical, CO2, water spray (fog) or foam. Use an extinguishing agent

suitable for the surrounding fire.

Unsuitable extinguishing

media

: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion

products

: Decomposition products may include the following materials:

nitrogen oxides metal oxide/oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for

chemical incidents.

Additional information (Explosibility)

No specific fire or explosion hazard.

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 spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialised 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".

Date of issue/Date of revision : 19/03/2021 Version :1 4/14 Date of previous issue : No previous validation

Hvdro A

SECTION 6: Accidental release measures

6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

6.4 Reference to other sections

: See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Do not store below the following temperature: 0°C (32°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Section 7. Handling and storage: The information in this section contains generic advice and guidance.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Occupational exposure limits (national)

SECTION 8: Exposure controls/personal protection

| Product/ingredient name | Exposure limit values |
|-------------------------|---|
| nitric acid | EH40/2005 WELs (United Kingdom (UK), 1/2020). STEL: 2.6 mg/m³ 15 minutes. STEL: 1 ppm 15 minutes. |

Occupational exposure limits (European Union)

| Product/ingredient name | Exposure limit values |
|-------------------------|---|
| nitric acid | EU OEL (Europe, 10/2019). STEL: 2.6 mg/m³ 15 minutes. STEL: 1 ppm 15 minutes. |

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness 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 (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

DNEL/DMEL Summary

PNECs

: Not applicable.

PNEC Summary : Not applicable.

8.2 Exposure controls

Appropriate engineering controls

If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Wear tightly-sealed safety glasses. (EN 166, splash goggles) If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. **Recommended:** Wear suitable gloves tested to EN374.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

SECTION 8: Exposure controls/personal protection

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Recommended: Combination filtering device (DIN EN 14387). Filter type K (P2).

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid. Colour Brown. Odourless. Odour **Odour threshold** Not applicable.

pН 5 to 6.5 Melting point/freezing point : Not available. Initial boiling point and boiling : Not available.

range

explosive limits

Solubility in water

: Not available. Flash point Not available. **Evaporation rate** Flammability (solid, gas) : Not applicable. Upper/lower flammability or : Not available.

: Not available. Vapour pressure Not available. Vapour density Relative density : Not available. 1.21 g/cm3 [20°C] Density Solubility(ies) Not available. : Not available.

Partition coefficient: n-octanol/

water

: Not available.

Auto-ignition temperature : Not available. **Decomposition temperature** : Not available.

Viscosity Dynamic (room temperature): <20 mPa·s **Explosive properties** No specific fire or explosion hazard.

Oxidising properties : None (Expert judgment).

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity

: No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

: The product is stable.

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

10.4 Conditions to avoid

Keep away from heat, sparks and flame. Do not store below the following temperature: 0°C.

10.5 Incompatible materials

: Reactive or incompatible with the following materials: Reducing agents, alkalis, oxidising agents.

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure | Remarks |
|---|------------------------------------|---------|-------------|----------|---------|
| bronopol (INN) | LD50 Dermal [OECD 402] | Rat | >2000 mg/kg | - | - |
| | LD50 Oral [OECD 401] | Rat | 305 mg/kg | - | - |
| 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) | LC50 Inhalation Dusts and mists | Rat | 0.33 mg/l | 4 hours | - |
| | LD50 Dermal | Rabbit | 78 mg/kg | - | - |
| | LD50 Oral | Rat | 64 mg/kg | - | - |

Conclusion/Summary Acute toxicity estimates

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

| Product/ingredient name | Oral (mg/ kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapours) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|------------------|-------------------|--------------------------------|-----------------------------------|--|
| Hydro A | 4392.7 | N/A | N/A | N/A | N/A |
| calcium nitrate | 500 | N/A | N/A | N/A | N/A |
| bronopol (INN) | 305 | 1100 | N/A | N/A | N/A |
| 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) | 64 | 78 | N/A | N/A | 0.33 |

Irritation/Corrosion

SECTION 11: Toxicological information

| Product/ingredient name | Result | Species | Score | Exposure | Observation | Remarks |
|---|----------------------------|---------|-------|----------|-------------|---------|
| bronopol (INN) | Skin - Irritant [OECD 404] | Rabbit | - | - | - | - |
| | Eyes - Severe irritant | Rabbit | - | - | - | - |
| 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) | Skin - Severe irritant | Rabbit | - | - | - | _ |
| | Eyes - Severe irritant | Rabbit | - | - | - | - |

Conclusion/Summary

Skin : Causes skin irritation.

Eyes : Causes serious eye damage.

Sensitisation

| Product/ingredient name | Route of exposure | Species | Result | Remarks |
|---|-------------------|------------|-------------|---------|
| 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) | skin | Guinea pig | Sensitising | - |

Conclusion/Summary

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

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary: Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|-------------------------|------------|-------------------|------------------------------|
| bronopol (INN) | Category 3 | | Respiratory tract irritation |

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes : Not available.

of exposure

Potential acute health effects

Eye contact : Causes serious eye damage.

SECTION 11: Toxicological information

: No known significant effects or critical hazards. Inhalation : No known significant effects or critical hazards. Skin contact Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

: Adverse symptoms may include the following: **Eye contact**

> pain watering redness

Inhalation : No specific data.

: Adverse symptoms may include the following: **Skin contact**

pain or irritation

redness

blistering may occur

Ingestion : Adverse symptoms may include the following:

stomach pains

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

Short term exposure

Potential immediate

effects

effects

: Not available.

Potential delayed effects

: Not available.

Long term exposure

Potential immediate

: Not available.

: Not available. Potential delayed effects

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General : No known significant effects or critical hazards. : No known significant effects or critical hazards. Carcinogenicity Mutagenicity : No known significant effects or critical hazards. Reproductive toxicity : No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure | Remarks |
|--|----------------------------|-------------------------------------|----------|---------|
| bronopol (INN) | Acute EC50 0.4 to 2.8 mg/l | Algae | 72 hours | - |
| | Acute EC50 1.4 mg/l | Daphnia | 48 hours | - |
| | Acute LC50 41.2 mg/l | Fish - Oncorhynchus mykiss | 96 hours | - |
| | Chronic NOEC 0.27 mg/l | Daphnia - Daphnia magna | 21 days | - |
| reaction mass of: 5-chloro-2-methyl- 4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol- | Acute EC50 0.027 mg/l | Algae - Raphidocelis subcapitata | 72 hours | - |

SECTION 12: Ecological information

| 3-one [EC no. 220-239-6] (3:1) | | | | |
|-----------------------------------|--------------------------|---------------------------------|----------|---|
| | Acute EC50 0.16 mg/l | Daphnia - Daphnia magna | 48 hours | - |
| | Acute LC50 0.19 mg/l | Fish - Oncorhynchus mykiss | 96 hours | - |
| | Chronic NOEC 0.0014 mg/l | Algae - Skeletonema costatum | 72 hours | - |
| | Chronic NOEC 0.1 mg/l | Daphnia - Daphnia magna | 21 days | - |
| | Chronic NOEC 0.05 mg/l | Fish - Oncorhynchus mykiss | 14 days | - |

Conclusion/Summary

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

12.2 Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|-------------------------|-----------|----------------|------|----------|
| bronopol (INN) | OECD 302B | 50 % - 28 days | - | - |

Conclusion/Summary: There are no data available on the mixture itself.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| bronopol (INN) | - | - | Inherent |

12.3 Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|---|--------|------|-----------|
| reaction mass of: 5-chloro- 2-methyl-4-isothiazolin- | - | <100 | low |
| 3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol- | | | |
| 3-one [EC no. 220-239-6] (3: 1) | | | |

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance.

13.1 Waste treatment methods

Product

SECTION 13: Disposal considerations

Methods of disposal

The generation of waste should be avoided or minimised wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

The allocation of waste identity numbers/waste descriptions must be carried out according to the EWC, specific to the industry and process.

Hazardous waste

Special precautions

Packaging

Methods of disposal

: The classification of the product may meet the criteria for a hazardous waste.

- : The generation of waste should be avoided or minimised wherever possible.
- : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

| | ADR/RID | ADN | IMDG | IATA |
|---------------------------------|----------------|----------------|----------------------|----------------|
| 14.1 UN number | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| 14.2 UN proper shipping name | - | - | - | - |
| 14.3 Transport hazard class(es) | - | - | - | - |
| Label | | | | |
| 14.4 Packing group | - | - | - | - |
| 14.5 Environmental hazards | No. | No. | Marine Pollutant: No | No. |

14.6 Special precautions for user

: **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.

14.7 Transport in bulk according to IMO instruments

: 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 authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Number 58 and 65.

SECTION 15: Regulatory information

Other EU regulations

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Canada : At least one component is not listed in DSL but all such components are listed in

NDSL.

China : All components are listed or exempted.

Europe : At least one component is not listed.

New Zealand : All components are listed or exempted.

Taiwan : All components are listed or exempted.

United States : All components are active or exempted.

Viet Nam : All components are listed or exempted.

15.2 Chemical safety

assessment

: Not applicable.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ADN = European Provisions concerning the International Carriage of Dangerous

Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor

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

EWC = European Waste Catalogue

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

SECTION 16: Other information

N/A = Not available

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration

RID = The Regulations concerning the International Carriage of Dangerous Goods by

Rail

RRN = REACH Registration Number

SGG = Segregation Group

vPvB = Very Persistent and Very Bioaccumulative

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

| Classification | Justification |
|------------------|--------------------|
| Eye Dam. 1, H318 | Calculation method |

Full text of abbreviated H statements

| H272 | May intensify fire; oxidiser. |
|--------|---|
| H301 | Toxic if swallowed. |
| H302 | Harmful if swallowed. |
| H310 | Fatal 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. |
| H330 | Fatal 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. |
| EUH071 | Corrosive to the respiratory tract. |

Full text of classifications [CLP/GHS]

| Acute Tox. 2 | ACUTE TOXICITY - Category 2 |
|-------------------|--|
| Acute Tox. 3 | ACUTE TOXICITY - Category 3 |
| Acute Tox. 4 | ACUTE TOXICITY - Category 4 |
| Aquatic Acute 1 | SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 |
| Aquatic Chronic 1 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 |
| Aquatic Chronic 2 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 |
| Eye Dam. 1 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 |
| Eye Irrit. 2 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 |
| Ox. Liq. 2 | OXIDISING LIQUIDS - Category 2 |
| Ox. Sol. 3 | OXIDISING SOLIDS - Category 3 |
| Skin Corr. 1A | SKIN CORROSION/IRRITATION - Category 1A |
| Skin Corr. 1C | SKIN CORROSION/IRRITATION - Category 1C |
| Skin Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2 |
| Skin Sens. 1A | SKIN SENSITISATION - Category 1A |
| STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - |
| | Category 3 |
| | |

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