

according to Regulation (EC) No. 1907/2006

| Product | Version | Revision Date: | SDS Number | Date of last issue: - |
|------------|---------|-----------------------|-------------|-----------------------|
| Boric Acid | 1.0 | 01.03.2021 | 30000017075 | Date of first issue: |
| | | | | 01.03.2021 |

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

1.1 Product identifier

| Trade name | : Boric Acid |
|---|------------------------------------|
| Substance name | : Boric Acid |
| CAS-No. | : 10043-35-3 |
| RTECS | : ED4550000 |
| TSCA | : TSCA 8(b) inventory : Boric Acid |
| Chemical Formula | : H ₃ BO ₃ |
| 1.2 <u>Relevant identified uses of the substance or mix</u> | xture and uses advised against |
| Use of the Substance/Mixture | : Chemical substance |
| 1.3 Details of the supplier of the safety data sheet | |
| Company | OUTESPZOO |

| Company | : QULE SP. 20.0. |
|--|-------------------|
| | Ul. Ostatnia 45 |
| | 60-102 Poznań |
| Telephone | : +44 7459 562486 |
| E-mail address of person responsible for the SDS | : info@qlab.uk |



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1.4 Emergency telephone number

Poisons Control Centre Krakow Emergency telephone number

: +48 12 411 99 99

Section 2: Composition and Information on Ingredients

| Composition | : Name CAS # % by Weight Boric Acid 10043-35-3 100 |
|-----------------------------------|---|
| Toxicological Data on Ingredients | : Boric acid: ORAL (LD50): Acute: 2660 mg/kg [Rat]. 3450 mg/kg [Mouse]. |
| Section 3: Hazards Identification | |
| Potential Acute Health Effects | : Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator). |
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| Potential Chronic Hea | lth Effects | <u>:</u> | | | |
| CARCINOGENIC | EFFECTS | 5 | : | Not available. | |
| MUTAGENIC EF | FECTS | | : | Mutagenic for b | acteria and/or yeast. |
| TERATOGENIC | EFFECTS | | : | Not available. | |
| DEVELOPMENTAL TOXICITY | | CITY | : Classified Reproductive | | |
| | | | | system/toxin/fer | male, Reproductive |
| | | | | system/ toxin/m | ale [POSSIBLE]. The |
| | | | | substance may b | e toxic to kidneys, |
| | | | | cardiovascular s | system, central nervous |
| | | | | system (CNS). I | Repeated or prolonged |
| | | | | • | substance can produce |
| | | | | target organs da | • |
| | | | | | - |
| Section 4: First Aid M | leasures | | | | |
| | | | | | |

Eye Contact

 Check for and remove any contact lenses.
 In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.
 Cold water may be used. Get medical attention. Remove skin with an emollient.



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| Skin Contact | | | : | | et, immediately ater. Cover the irritated othing and shoes. Cold |
| | | | | | ed. Wash clothing before |
| | | | | reuse. Thorough | ly clean shoes before |
| | | | | reuse. Get medic | al attention. |
| Serious Skin Conta | ict | | : | Wash with a disi | nfectant soap and cover |
| | | | | the contaminate | d skin with an anti- |
| | | | | bacterial cream. | Seek medical attention. |
| Inhalation | | | : | If inhaled, remo | ve to fresh air. If not |
| | | | | breathing, give | artificial respiration. If |
| | | | | breathing is diff | ïcult, give oxygen. Get |
| | | | | medical attentio | n. |
| Serious Inhalation | | | : | Not available. | |
| Ingestion | | | : | Do NOT induce | vomiting unless directed to |
| | | | | do so by medica | l personnel. Never give |
| | | | | anything by mo | uth to an unconscious |
| | | | | person. Loosen | tight clothing such as a |
| | | | | | |



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| | | | | | waistband. Get medical |
| | | | | attention if symp | toms appear. |
| Serious Ingestion | | | : | Not available. | |
| | | | | | |
| Section 5: Fire and Ex | xplosion D | ata | | | |
| Flammability of the | e Product | | : | Non-flammable. | |
| Auto-Ignition Tem | perature | | : | Not applicable. | |
| Flash Points | | | : | Not applicable. | |
| Flammable Limits | | | : | Not applicable. | |
| Products of Combu | ustion | | : | Not available. | |
| Fire Hazards in Pr | esence of V | various Substances | : | Not applicable. | |



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| Explosion Hazards in Presence of Various Substances | | | : | Not available. | |
| Risks of explosion of the product in presence of mechanical impact | | | : | Not available. | |
| Risks of explosion of the product in presence of static discharge | | | : | Not available. | |
| Fire Fighting Media and Instructions | | | : | Not applicable. | |
| Special Remarks o | n Fire Haz | ards | : | Not available. | |
| Special Remarks o | n Explosio | n Hazards | : | explode on impa | tassium and boric acid may act. A mixture of boric acid ide will explode when C |

Section 6: Accidental Release Measures

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| ~ ~ ~ ~ | | | | |
| Small Spill | | | : Use appropria | te tools to put the spilled |
| | | | solid in a con | venient waste disposal |
| | | | container. Fir | ish cleaning by spreading |
| | | | water on the | contaminated surface and |
| | | | dispose of ac | cording to local and regional |
| | | | authority requ | irements. |
| Large Spill | | | : Use a shovel t | o put the material into a |
| | | | convenient wa | ste disposal container. Finish |
| | | | cleaning by sp | reading water on the |
| | | | contaminated | surface and allow to |
| | | | evacuate throu | igh the sanitary system. |
| | | | | |

Section 7: Handling and Storage

Precautions: Keep locked up.. Do not ingest. Do not
breathe dust. Wear suitable protective
clothing. In case of insufficient ventilation,
wear suitable respiratory equipment. If
ingested, seek medical advice immediately
and show the container or the label. Avoid
contact with skin and eyes. Keep away
from incompatibles such as alkalis.



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| Storage | | | : Keep container t | ightly closed. Keep |

: Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 23°C (73.4°F).

Section 8: Exposure Controls/Personal Protection

| Engineering Controls | • Use process enclosures local exhaust |
|-------------------------------------|---|
| Engineering Controls | : Use process enclosures, local exhaust |
| | ventilation, or other engineering controls |
| | to keep airborne levels below |
| | recommended exposure limits. If user |
| | operations generate dust, fume or mist, |
| | use ventilation to keep exposure to |
| | airborne contaminants below the exposure |
| | limit. |
| Personal Protection | : Splash goggles. Lab coat. Dust respirator. |
| | Be sure to use an approved/certified |
| | respirator or equivalent. Gloves. Personal |
| Protection in Case of a Large Spill | : Splash goggles. Full suit. Dust respirator. |
| | Boots. Gloves. A self contained breathing |
| | apparatus should be used to avoid |
| | |



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| | | | inhalatio | n of the | product. Suggested | |
| | | | | | | |
| | | | | | ng might not be sufficient; | |
| | | | | special | ist BEFORE handling this | |
| | | | product. | | | |
| | | | | | | |
| Exposure Limits | | | : Not avai | lable. | | |
| | | | | | | |
| | | | | | | |
| Section 9: Physical ar | nd Chemica | al Properties | | | | |
| | | | | | | |
| | | | | | | |
| Physical state and | appearanc | e | : Solid. (Powdered solid.) | | | |
| | | | | | | |
| Odor | | | : Odorless | | | |
| 0.001 | | | | | | |
| Taste | | | : Bitter. (S | light) | | |
| Taste | | | • Ditter. (S | ingini.) | | |
| | | | | | | |
| Molecular Weight | | | : 61.83 g/1 | nole | | |
| | | | | | | |
| Color | | | : White. | | | |
| | | | | | | |
| PH (1% soln/water) | | | : 5.2 [Acid | dic.] | | |
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| Boiling Point | | | : 300°C (572°F) | |
| bonnig i omt | | | • 500 C (572 P) | |
| | | | | |
| Melting Point | | | : 169°C (336.2°F) | |
| | | | | |
| Critical Temperat | ure | | : Not available. | |
| | | | | |
| Specific Gravity | | | : 1.435 (Water = 1 |) |
| | | | | |
| Vapor Pressure | | | : Not applicable. | |
| | | | | |
| Vapor Density | | | : Not available. | |
| | | | | |
| Volatility | | | : Not available. | |
| | | | | |
| Odor Threshold | | | : Not available. | |
| | | | | |
| Water/Oil Dist. Co | eff. | | : Not available. | |
| | - | | | |
| Ionicity (in Water) | | | : Not available. | |
| iomeny (m water) | | | • Not available. | |
| | | | | |
| | | | | |



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| Dispersion Proper | Dispersion Properties | | : | See solubility in | water, methanol. |
| | | | | , | ····· , ··· · · · |
| Solubility | | | : | Soluble in hot w | ater, methanol. Partially |
| | | | | soluble in cold v | vater. Very slightly soluble |
| | | | | in acetone. | |
| | | | | | |
| | | | | | |
| Section 10: Stability a | nd Reactiv | itv Data | | | |
| | | | | | |
| | | | | | |
| Stability | | | : | The product is s | table |
| | | | • | ine producers s | |
| Instability Temper | ature | | • | Not available. | |
| instability remper | utur c | | • | rtot uv unuolo. | |
| Conditions of Insta | bility | | : | High temperatur | res, dust generation, |
| | U | | | incompatible ma | - |
| | | | | L I | |
| Incompatibility wit | th various : | substances | : | Reactive with al | kalis. |
| p | | | | | |
| Corrosivity | | | • | Not available. | |
| COLLOSIVEY | | | • | 1,00 u ; unu010. | |
| Special Remarks o | n Reactivit | V | | Incompatible wi | th Potassium, Acetic |
| Special Kennarks 0. | n Keach i h | ·J | · | incompatible wi | an roussiann, riceae |
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| | | | | Anhydride. Read | ets with basic materials to s. |
| Special Remarks on Corrosivity | | | : Not available. | | |
| Polymerization | | | : | Will not occur. | |
| Section 11: Toxicolog | ical Inform | nation | | | |
| Routes of Entry | | | : | Absorbed throug | gh skin. Inhalation. |
| Toxicity to Animal | Toxicity to Animals | | | Ingestion. Acute oral toxic [Rat]. | ity (LD50): 2660 mg/kg |
| Chronic Effects on | Chronic Effects on Humans | | : | | EFFECTS: Mutagenic for |
| DEVELOPMENT | AL TOXIC | CITY | : | Classified Repro system/toxin/fer system/toxin/ma cause | oductive male, Reproductive ale [POSSIBLE]. May |
| | | | | damage to the fe | ollowing organs: kidneys, |



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| | | | | | |
| | | | | 1' 1 | 1 |
| | | | | | ystem, central nervous |
| | | | | system (CNS). | |
| Other Toxic Effec | ts on Hum | ans | : | | se of skin contact (irritant), |
| | | | | - | inhalation. Slightly |
| | | | | hazardous in ca | se of skin contact |
| | | | | (permeator). | |
| Special Remarks o | n Toxicity | to Animals | : | Not available. | |
| Special Remarks o | n Chronic | Effects on Human | | • | rse reproductive effects |
| | | | | • | ity) based on animal |
| | | | | | ect genetic material. May |
| | | | | - | c effects based on animal |
| | | | | studies. | |
| Special Remarks o | n other To | xic Effects on Hum | nans | : Acute Potenti | al Health Effects: Skin: |
| | | | | May cause sk | in irritation. May be |
| | | | | absorbed thro | uogh damaged or abraded |
| | | | | skin in harmfu | al amounts. If absorbed |
| | | | | through it may | y affect behavior, sense |
| | | | | organs, | |
| | | | | | |

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| Eyes Inhalation | | | the respiratory tdepression): Dust causes eye | |
| Ingestion | | | irritation with na diarrhea. May a the Central Nerv headache, dizzin | e (gastrointestinal) tract ausea, vomiting and lso affect behavior, brain, vous System (depression, ness, drowsiness, collapse, s, coma), Peripheral |
| | | | Nervous Systen blood, liver, uri bladder) and ene | n, cardiovascular system, nary system (kidney, ureter, docrine system . |
| Chronic Potential | Health Effe | ects | : Boric acid can a bone) with repe | accumlate in the body(brain, eated exposure. |



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Prolonged or repeated skin contact may cause dermatitis. May cause borism characterized by dry skin, skin eruptions, and gastric disturbances.

Section 12: Ecological Information

| : Not available. |
|---|
| : Not available. |
| : Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. |
| : The product itself and its products of degradation are not toxic. |
| : Not available. |
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| | | | | | |
| Section 13: Disposal (| Considerat | ions | | | |
| Waste Disposal: | | | | | |
| Section 14: Transport | Informatio | on | | | |
| DOT Classification | | | : Not a DOT controlled material (United States). | | |
| Identification | | | : Not applicable. | | |
| Special Provisions for Transport | | | : Not applicable. | | |
| Section 15: Other Reg | gulatory Inj | formation | | | |
| Federal and State Regulations | | 8 | : TSCA 8(b) | | |
| Inventory | | | : Boric acid | | |

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Other Regulations:

| OSHA | : Hazardous by definition of Hazard |
|------------------------|--|
| | Communication Standard (29 CFR |
| | 1910.1200). |
| Other Classifications: | |
| WHMIS (Canada) | : CLASS |
| D-2A | : Material causing other toxic effects (VERY TOXIC). |
| DSCL (EEC) | R36/38- Irritating to eyes and skin. R40- Possible risks of irreversible effects. R62- Possible risk of impaired fertility. S24/25Avoid contact with skin and eyes. |
| <u>HMIS (U.S.A.)</u> : | |



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| Health Hazard | | | : | 2 | |
| | | | | | |
| Fire Hazard | | | : | 0 | |
| | | | | | |
| Reactivity | | | : | 0 | |
| | | | | | |
| Personal Protection | n | | : | Ε | |
| | | | | | |
| <u>National Fire Prote</u> | ection Asso | ciation (U.S.A.): | | | |
| | | | | | |
| Health | | | : | 1 | |
| | | | | | |
| Flammability | | | : | 0 | |
| Desetivity | | | | 0 | |
| Reactivity | | | · | 0 | |
| Specific hazard: | | | | | |
| <u>~</u> | | | | | |
| Protective Equipm | ent | | : | Gloves. Lab coa | t. Dust respirator. |
| | | | | Be sure to use a | |
| | | | | approved/certifi | ed respirator or |
| | | | | equivalent. Wea | ar appropriate |
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respirator when ventilation is inadequate. Splash goggles.

Section 16: Other Information

| References | : Not available. |
|------------------------------|------------------|
| Other Special Considerations | : Not available. |
| Created | : 01/12/2020 |
| Last Updated | : 01/12/2020 |

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