Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
GHS

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

- 1.1 Product identifier
  - Trade name: Turbidx™
  - CAS Number: 12173-10-3
  - EC number: 215-283-8

- 1.2 Relevant identified uses of the substance or mixture and uses advised against
  No further relevant information available.

- Application of the substance / the preparation Drinking Water Filter Media

- 1.3 Details of the supplier of the Safety Data Sheet
  - Manufacturer/Supplier:
    Hydro Source LLC
    1501 N. 28th Street
    Harlingen, TX 78550
    Phone: 956-425-1110

- 1.4 Emergency telephone number:
  Available Mon.-Fri., 8 a.m. - 5 p.m.
  (956)425-1110, Fax (956)423-4994

2 Hazards identification

- 2.1 Classification of the substance or mixture
  - Classification according to Regulation (EC) No 1272/2008
    
    GHS07
    Acute Tox. 4 H332 Harmful if inhaled.
    Skin Irrit. 2 H315 Causes skin irritation.
    Eye Irrit. 2 H319 Causes serious eye irritation.
    STOT SE 3 H335 May cause respiratory irritation.

  - Classification according to Directive 67/548/EEC or Directive 1999/45/EC
    
    Xn; Harmful
    R20: Harmful by inhalation.
    Xi; Irritant
    R36/37/38: Irritating to eyes, respiratory system and skin.

  - Information concerning particular hazards for human and environment: Not applicable.

- 2.2 Label elements
  - Labelling according to Regulation (EC) No 1272/2008
    The substance is classified and labelled according to the CLP regulation.

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- Hazard pictograms

GHS07

- Signal word Warning

- Hazard-determining components of labelling:
  Clinoptilolite Zeolite/ Potassium, Calcium, Sodium Aluminosilicate

- Hazard statements
  H332 Harmful if inhaled.
  H315 Causes skin irritation.
  H319 Causes serious eye irritation.
  H335 May cause respiratory irritation.

- Precautionary statements
  P280 Wear eye/face protection.
  P261 Avoid breathing dust.
  P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
  P403+P233 Store in a well-ventilated place. Keep container tightly closed.

- Hazard description:

- WHMIS-symbols:
  D2B - Toxic material causing other toxic effects

- NFPA ratings (scale 0 - 4)
  Health = 2
  Fire = 0
  Reactivity = 0

- HMIS-ratings (scale 0 - 4)

- HMIS Long Term Health Hazard Substances
  Substance is not listed.

- 2.3 Other hazards
  - Results of PBT and vPvB assessment
  - PBT: Not applicable.
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· vPvB: Not applicable.

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3 Composition/information on ingredients

· 3.1 Substances
  · CAS No. Description
    12173-10-3 Clinoptilolite Zeolite/ Potassium, Calcium, Sodium
    Aluminosilicate
  · Identification number(s)
  · EC number: 215-283-8
  · Impurities and stabilising additives:
    Present below 0.1%: quartz/crystalline silica.

<table>
<thead>
<tr>
<th>CAS: 14808-60-7</th>
<th>Quartz (SiO2)</th>
<th>Xn H48/20</th>
<th>STOT RE 2, H373</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 238-878-4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4 First aid measures

· 4.1 Description of first aid measures
  · General information:
    Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48
    hours after the accident.
  · After inhalation: Supply fresh air; consult doctor in case of complaints.
  · After skin contact:
    Immediately wash with water and soap and rinse thoroughly.
    If skin irritation continues, consult a doctor.
  · After eye contact:
    Remove contact lenses if worn.
    Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  · After swallowing:
    Rinse out mouth and then drink plenty of water.
    Do not induce vomiting; call for medical help immediately.

· 4.2 Most important symptoms and effects, both acute and delayed
  No further relevant information available.
· Hazards No further relevant information available.
· 4.3 Indication of any immediate medical attention and special treatment needed
  No further relevant information available.

5 Firefighting measures

· 5.1 Extinguishing media
  · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
  · For safety reasons unsuitable extinguishing agents: None.
· 5.2 Special hazards arising from the substance or mixture
  No further relevant information available.

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- 5.3 Advice for firefighters  
  • Protective equipment:  
    Wear self-contained respiratory protective device.  
    Wear fully protective suit.  
  • Additional information No further relevant information available.

6 Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures  
  Use respiratory protective device against the effects of fumes/dust/aerosol.  
  Ensure adequate ventilation  
- 6.2 Environmental precautions: No special measures required.  
- 6.3 Methods and material for containment and cleaning up:  
  Pick up mechanically.  
  Dispose contaminated material as waste according to item 13.  
  Ensure adequate ventilation.  
- 6.4 Reference to other sections  
  See Section 7 for information on safe handling.  
  See Section 8 for information on personal protection equipment.  
  See Section 13 for disposal information.

7 Handling and storage

- 7.1 Precautions for safe handling  
  Ensure good ventilation/exhaustion at the workplace.  
  Thorough dedusting.  
  Prevent formation of dust.  
  • Information about fire - and explosion protection: No special measures required.  
- 7.2 Conditions for safe storage, including any incompatibilities  
- Storage:  
  • Requirements to be met by storerooms and receptacles:  
    Avoid storage near extreme heat, ignition sources or open flame.  
    Provide ventilation for receptacles.  
  • Information about storage in one common storage facility:  
    Store away from oxidizing agents.  
    Store away from foodstuffs.  
  • Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.  
- 7.3 Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
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- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
  The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **DNELs** No further relevant information available.
- **PNECs** No further relevant information available.
- **Additional information:** The lists valid during the making were used as basis.

- **8.2 Exposure controls**
- **Personal protective equipment:**
  - **General protective and hygienic measures:**
    Keep away from foodstuffs, beverages and feed.  
    Immediately remove all soiled and contaminated clothing  
    Wash hands before breaks and at the end of work.  
    Do not inhale dust / smoke / mist.
- **Respiratory protection:**
  Not required under normal conditions of use.
  Use respiratory protection when grinding or cutting material.
  Use suitable respiratory protective device when high concentrations are present.
- **Protection of hands:**
  ![Protective gloves](image)
  Protective gloves
- **Eye protection:**
  ![Safety glasses](image)
  Safety glasses

- **Body protection:** Protective work clothing
- **Limitation and supervision of exposure into the environment**
  No further relevant information available.
- **Risk management measures**
  See Section 7 for additional information.
  No further relevant information available.

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9 Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
  - **Form:** Granulate
  - **Colour:** Yellowish
  - **Odour:** Characteristic
  - **Odour threshold:** Not determined.

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- pH-value: Not determined.
- Change in condition
  - Melting point/Melting range: Undetermined.
  - Boiling point/Boiling range: Undetermined.
- Flash point: Not applicable.
- Flammability (solid, gaseous): Not applicable.
- Ignition temperature: Not determined.
- Decomposition temperature: Not determined.
- Self-igniting: Not determined.
- Danger of explosion: Product does not present an explosion hazard.
- Explosion limits:
  - Lower: Not determined.
  - Upper: Not determined.
- Vapour pressure: Not determined.
- Density at 20 °C: 2.2 - 2.4 g/cm³
  - Relative density: Not determined.
  - Vapour density: Not determined.
  - Evaporation rate: Not determined.
- Solubility in / Miscibility with water: Not miscible or difficult to mix.
- Partition coefficient (n-octanol/water): Not determined.
- Viscosity:
  - Dynamic: Not determined.
  - Kinematic: Not determined.
- 9.2 Other information No further relevant information available.

10 Stability and reactivity

- 10.1 Reactivity
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:
  No decomposition if used and stored according to specifications.
- 10.3 Possibility of hazardous reactions
  As the product is supplied it is not capable of dust explosion; however enrichment with fine dust causes risk of dust explosion.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.

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- 10.6 Hazardous decomposition products: Toxic metal oxide smoke

11 Toxicological information

- 11.1 Information on toxicological effects
  - Acute toxicity:
  - Primary irritant effect:
    - on the skin: Irritant to skin and mucous membranes.
    - on the eye: Irritating effect.
  - Sensitization: No sensitizing effects known.
  - Repeated dose toxicity: May cause damage to organs through prolonged or repeated exposure.

12 Ecological information

- 12.1 Toxicity
  - Aquatic toxicity: No further relevant information available.
  - 12.2 Persistence and degradability: No further relevant information available.
  - 12.3 Bioaccumulative potential: No further relevant information available.
  - 12.4 Mobility in soil: No further relevant information available.
- Additional ecological information:
  - General notes: Generally not hazardous for water
- 12.5 Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
- 12.6 Other adverse effects: No further relevant information available.

13 Disposal considerations

- 13.1 Waste treatment methods
- Recommendation
  - Smaller quantities can be disposed of with household waste.
  - Can be reused after reprocessing.
- Uncleaned packaging:
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- 14.1 UN-Number
  - DOT, ADR, ADN, IMDG, IATA: N/A
- 14.2 UN proper shipping name
  - DOT, ADR, ADN, IMDG, IATA: N/A

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### Trade name: Turbidx™

- **14.3 Transport hazard class(es)**
  - DOT, ADR, ADN, IMDG, IATA
  - Class: N/A
- **14.4 Packing group**
  - DOT, ADR, IMDG, IATA: N/A
- **14.5 Environmental hazards:**
  - Marine pollutant: No
- **14.6 Special precautions for user**
  - Not applicable.
- **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
  - Not applicable.
- **UN "Model Regulation":**
  - Not applicable.

### 15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - United States (USA)
  - SARA
  - **Section 355 (extremely hazardous substances):**
    - Substance is not listed.
  - **Section 313 (Specific toxic chemical listings):**
    - Substance is not listed.
  - **TSCA (Toxic Substances Control Act):**
    - Substance is not listed.
  - **Proposition 65 (California):**
    - Chemicals known to cause cancer:
      - Present in trace quantities.
      - 14808-60-7 Quartz (SiO2)
      - 14464-46-1 cristobalite
    - Chemicals known to cause reproductive toxicity for females:
      - Substance is not listed.
    - Chemicals known to cause reproductive toxicity for males:
      - Substance is not listed.
    - Chemicals known to cause developmental toxicity:
      - Substance is not listed.
- **Carcinogenic Categories**
  - EPA (Environmental Protection Agency)
    - Substance is not listed.

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Trade name: Turbidex™

- IARC (International Agency for Research on Cancer)
  Substance is not listed.
- TLV (Threshold Limit Value established by ACGIH)
  Substance is not listed.
- NIOSH-Ca (National Institute for Occupational Safety and Health)
  Substance is not listed.
- OSHA-Ca (Occupational Safety & Health Administration)
  Substance is not listed.

- Canada
  - Canadian Domestic Substances List (DSL)
    Substance is not listed.
  - Canadian Ingredient Disclosure list (limit 0.1%)
    Substance is not listed.
  - Canadian Ingredient Disclosure list (limit 1%)
    Substance is not listed.

- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  DOT: US Department of Transportation
  IATA: International Air Transport Association
  GHS: Globally Harmonized System of Classification and Labelling of Chemicals
  ACGIH: American Conference of Governmental Industrial Hygienists EINECS:
  European Inventory of Existing Commercial Chemical Substances CAS:
  Chemical Abstracts Service (division of the American Chemical Society)
  NFPA: National Fire Protection Association (USA)
  HMIS: Hazardous Materials Identification System (USA)
  WHMIS: Workplace Hazardous Materials Information System (Canada)
  DNEL: Derived No-Effect Level (REACH)
  PNEC: Predicted No-Effect Concentration (REACH)

- Sources
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