

**4-Bromobenzhydrol** Safety Data Sheet 26019X3 according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 08/04/2016 Version: 1.0

| SECTION 1: Identification  |  |
|--|--|
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| 1.1. Identification  |  |
| Product form   | : Substance  |
| Substance name   | : 4-Bromobenzhydrol  |
| CAS No   | : 29334-16-5   |
| Product code   | : 2601-9-X3  |
| Formula  | : C13H11BrO  |
| Other means of identification  | : MFCD00016851   |
|  | tance or mixture and uses advised against  |
| Use of the substance/mixture   | : Laboratory chemicals<br>Manufacture of substances<br>Scientific research and development   |
| 1.3. Details of the supplier of the safety   | data sheet   |
| SynQuest Laboratories, Inc.<br>P.O. Box 309<br>Alachua, FL 32615 - United States of America<br>T (386) 462-0788 - F (386) 462-7097<br>info@synquestlabs.com - www.synquestlabs.com | <u>n</u>   |
| 1.4. Emergency telephone number  |  |
| Emergency number   | : (844) 523-4086 (3E Company - Account 10069)  |
| SECTION 2: Hazard(s) identification  |  |
| 2.1. Classification of the substance or m  | ixture   |
| Classification (GHS-US)  |  |
| Skin Irrit. 2 H315 - Causes skin irritation<br>Eye Irrit. 2A H319 - Causes serious eye irritat   | ion  |
| STOT SE 3 H335 - May cause respiratory irri  | tation   |
| Full text of H-phrases: see section 16   |  |
| 2.2. Label elements  |  |
| GHS-US labeling  |  |
| Hazard pictograms (GHS-US)   | GHS07  |
| Signal word (GHS-US)   | : Warning  |
| Hazard statements (GHS-US)   | : H315 - Causes skin irritation<br>H319 - Causes serious eye irritation<br>H335 - May cause respiratory irritation   |
| Precautionary statements (GHS-US)  | <ul> <li>P261 - Avoid breathing dust, mist, spray</li> <li>P264 - Wash skin thoroughly after handling</li> <li>P271 - Use only outdoors or in a well-ventilated area</li> <li>P280 - Wear protective gloves/protective clothing/eye protection/face protection</li> <li>P302+P352 - If on skin: Wash with plenty of soap and water</li> <li>P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing</li> <li>P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing</li> <li>P312 - Call a POISON CENTER or doctor/physician if you feel unwell</li> <li>P321 - Specific treatment (see supplemental first aid instructions on this label)</li> <li>P332+P313 - If skin irritation occurs: Get medical advice/attention</li> <li>P337+P313 - If eye irritation persists: Get medical advice/attention</li> <li>P362+P364 - Take off contaminated clothing and wash it before reuse</li> <li>P403+P233 - Store in a well-ventilated place. Keep container tightly closed</li> <li>P405 - Store locked up</li> <li>P501 - Dispose of contents/container to an approved waste disposal plant</li> </ul> |

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| according to Federal Register / Vol. 77, No. 58 / Monda     | y, March 26   | , 2012 / Rules and Regulations  |                    |   |
|---|---------------|---|--------------------|---|
| 2.3. Other hazards  |               |   |                    |   |
| No additional information available                         |               |   |                    |   |
| 2.4. Unknown acute toxicity (GHS US)                        |               |   |                    |   |
| Not applicable  |               |   |                    |   |
| SECTION 3: Composition/informati                            | on on ir      | gredients   |                    |   |
| 3.1. Substance  |               |   |                    |   |
| Substance type  | : Mon         | o-constituent   |                    |   |
| Name  |               | Product identifier  | %                  | Classification (GHS-US)                                       |
| 4-Bromobenzhydrol<br>(Main constituent)                     |               | (CAS No) 29334-16-5   | <= 100             | Skin Irrit. 2, H315<br>Eye Irrit. 2A, H319<br>STOT SE 3, H335 |
| Full text of H-phrases: see section 16                      |               |   |                    |   |
| 3.2. Mixture  |               |   |                    |   |
| Not applicable  |               |   |                    |   |
| SECTION 4: First aid measures                               |               |   |                    |   |
| 4.1. Description of first aid measures                      |               |   |                    |   |
| First-aid measures general                                  |               | se of accident or if you feel unwell, seek e possible). Move the affected personnel         |                    |   |
| First-aid measures after inhalation                         | : Rem         | ove person to fresh air and keep comforta<br>ration. Get medical advice/attention.          | ,                  |   |
| First-aid measures after skin contact                       | •             | n with plenty of soap and water. Get med  | ical advice/atter  | ntion   |
| First-aid measures after eye contact                        |               | ediately flush eyes thoroughly with water   |                    |   |
| First-aid measures after ingestion                          | pres          | ent and easy to do. Continue rinsing. Get<br>OT induce vomiting. Never give anything        | medical advice     | /attention.   |
| <u> </u>  |               | h out with water. Get medical advice/atte   |                    | ,   |
| 4.2. Most important symptoms and effe                       |               |   |                    |   |
| Symptoms/injuries   |               | most important known symptoms and effe<br>and/or in section 11.                             | ects are describ   | ed in the labelling (see section                              |
| 4.3. Indication of any immediate medic                      | al attentio   | n and special treatment needed  |                    |   |
| Treat symptomatically.                                      |               |   |                    |   |
| SECTION 5: Firefighting measures                            |               |   |                    |   |
| 5.1. Extinguishing media                                    |               |   |                    |   |
| Suitable extinguishing media                                |               | nol resistant foam. Carbon dioxide. Dry popriate for surrounding fire.                      | owder. Water sp    | oray. Use extinguishing media                                 |
| 5.2. Special hazards arising from the s                     | ubstance      | or mixture  |                    |   |
| Fire hazard   |               | mal decomposition generates: Carbon ox  | ides. Hydrogen     | bromide.  |
| 5.3. Advice for firefighters                                |               |   |                    |   |
| Firefighting instructions                                   | ; In ca       | se of fire: Evacuate area.  |                    |   |
| Protection during firefighting                              | : Wea         | r gas tight chemically protective clothing i<br>ratus. For further information refer to sec |                    |   |
| SECTION 6: Accidental release me                            |               |   |                    | · ·   |
|   |               | and amorganey presedures  |                    |   |
| 6.1. Personal precautions, protective e<br>General measures |               | uate unnecessary personnel. Ensure ade  | quate air vontil   | ation. Do not breathe dust                                    |
| General measures  | . Lvat        | uale unnecessary personnel. Ensure aut  | equate all ventili | allon. Do not breathe dust.                                   |
| 6.1.1. For non-emergency personnel Emergency procedures     | : Only        | qualified personnel equipped with suitab  | le protective equ  | uipment may intervene.  |
| 6.1.2. For emergency responders                             |               |   |                    |   |
| Protective equipment  |               | ot attempt to take action without suitable to section 8: "Exposure controls/persona         |                    | oment. For further information                                |
| 6.2. Environmental precautions                              |               | · ·   |                    |   |
| Avoid release to the environment. Notify autho              | rities if pro | duct enters sewers or public waters.  |                    |   |
| 6.3. Methods and material for containing                    |               | ·   |                    |   |
| For containment   |               | leak if safe to do so.  |                    |   |
|   |               |   |                    |   |

# **4-Bromobenzhydrol** Safety Data Sheet

| according to Federal Register / Vol. 77, No | 58 / Monday, March 26, 2012 / Rules and Regulations  |
|---|--|
| Methods for cleaning up                     | : Sweep or shovel spills into appropriate container for disposal. Minimize generation of dust.   |
| Other information                           | : For disposal of solid materials or residues refer to section 13 : "Disposal considerations".   |
| 6.4. Reference to other secti               | ons  |
| No additional information available         |  |
| SECTION 7: Handling and                     | storage  |
| 7.1. Precautions for safe har               | Idling   |
| Precautions for safe handling               | Do not handle until all safety precautions have been read and understood. Ensure good<br>ventilation of the work station. Do not breathe dust, mist, spray. Wear personal protective<br>equipment. Avoid contact with skin and eyes. |
| Hygiene measures                            | : Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or<br>smoke when using this product. Always wash hands after handling the product.  |
| 7.2. Conditions for safe stor               | age, including any incompatibilities   |
| Technical measures                          | : Comply with applicable regulations.  |
| Storage conditions                          | : Keep container closed when not in use.   |
| Incompatible materials                      | : Refer to Section 10 on Incompatible Materials.   |
|   |  |

Storage area : Store in dry, cool, well-ventilated area.

## SECTION 8: Exposure controls/personal protection

#### **Control parameters** 8.1.

No additional information available

| 8.2. Exposure controls           |   |
|----------------------------------|---|
| Appropriate engineering controls | : Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. |
| Hand protection                  | : Protective gloves. 29 CFR 1910.138: Hand Protection.  |
| Eye protection                   | : Chemical goggles or safety glasses. Face shield. 29 CFR 1910.133: Eye and Face Protection.  |
| Skin and body protection         | : Wear suitable protective clothing.  |
| Respiratory protection           | : In case of inadequate ventilation wear respiratory protection. 29 CFR 1910.134: Respiratory<br>Protection.  |
| Other information                | : Safety shoes. 29 CFR 1910.136: Foot Protection.   |

## **SECTION 9: Physical and chemical properties**

| 9.1. Information on basic physical a        | nd chemical properties |
|---|------------------------|
| Physical state                              | : Solid                |
| Color                                       | : No data available    |
| Odor  | : No data available    |
| Odor threshold                              | : No data available    |
| рН  | : No data available    |
| Melting point                               | : 61 - 63 °C           |
| Freezing point                              | : No data available    |
| Boiling point                               | : No data available    |
| Flash point                                 | : No data available    |
| Relative evaporation rate (butyl acetate=1) | : No data available    |
| Flammability (solid, gas)                   | : No data available    |
| Explosion limits                            | : No data available    |
| Explosive properties                        | : No data available    |
| Oxidizing properties                        | : No data available    |
| Vapor pressure                              | : No data available    |
| Relative density                            | : No data available    |
| Relative vapor density at 20 °C             | : No data available    |
| Molecular mass                              | : 263.13 g/mol         |
| Solubility                                  | : No data available    |
| Log Pow                                     | : No data available    |

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Auto-ignition temperature                                       | : No data available   |
|---|---|
| Decomposition temperature                                       | : No data available   |
| Viscosity   | : No data available   |
| Viscosity, kinematic  | : No data available   |
| Viscosity, dynamic  | : No data available   |
| 9.2. Other information  |   |
| No additional information available                             |   |
| <b>SECTION 10: Stability and react</b>                          | ivity   |
| 10.1. Reactivity  |   |
| No additional information available                             |   |
| 10.2. Chemical stability  |   |
| The product is stable at normal handling an                     | nd storage conditions.  |
| 10.3. Possibility of hazardous reaction                         | ons   |
| No additional information available                             |   |
| 10.4. Conditions to avoid                                       |   |
| Keep away from heat, sparks and flame.                          |   |
| 10.5. Incompatible materials                                    |   |
| Strong bases. Strong oxidizing agents.                          |   |
| 10.6. Hazardous decomposition pro                               | ducts   |
| Under normal conditions of storage and use fire, see Section 5. | e, hazardous decomposition products should not be produced. Hazardous decomposition products in case of |
| <b>SECTION 11: Toxicological infor</b>                          | rmation   |
|   |   |

| Acute toxicity  | : Not classified   |
|---|--|
| Skin corrosion/irritation<br>Serious eve damage/irritation                | : Causes skin irritation.<br>: Causes serious eye irritation.              |
| Respiratory or skin sensitization<br>Germ cell mutagenicity               | : Not classified<br>: Not classified                                       |
| Carcinogenicity   | : Not classified   |
| Reproductive toxicity<br>Specific target organ toxicity (single exposure) | <ul><li>Not classified</li><li>May cause respiratory irritation.</li></ul> |
| Specific target organ toxicity (repeated exposure)                        | : Not classified   |
| Aspiration hazard   | : Not classified   |

| SECTI                               | ON 12: Ecological information |  |  |
|-------------------------------------|-------------------------------|--|--|
| 12.1.                               | Toxicity                      |  |  |
| No addit                            | ional information available   |  |  |
| 12.2.                               | Persistence and degradability |  |  |
| No addit                            | ional information available   |  |  |
| 12.3.                               | Bioaccumulative potential     |  |  |
| No additional information available |                               |  |  |
| 12.4.                               | Mobility in soil              |  |  |
| No addit                            | ional information available   |  |  |
| 12.5.                               | Other adverse effects         |  |  |
| No additional information available |                               |  |  |

12/06/2016

#### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| SECTION 13: Disposal considerations |   |  |
|-------------------------------------|---|--|
| 13.1. Waste treatment methods       |   |  |
| Waste treatment methods             | : Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber.   |  |
| Waste disposal recommendations      | : Dispose of contents/container in accordance with licensed collector's sorting instructions. |  |
| Additional information              | : Recycle the material as far as possible.  |  |

### **SECTION 14: Transport information**

#### Department of Transportation (DOT)

In accordance with DOT Not regulated for transport

#### TDG

No additional information available

#### Transport by sea

No additional information available

#### Air transport

No additional information available

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

| 4-Bromobenzhydrol | CAS No 29334-16-5 | 100% |
|-------------------|-------------------|------|
|                   |                   |      |

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

#### 15.2. International regulations

#### CANADA

No additional information available

EU-Regulations No additional information available

#### National regulations

No additional information available

#### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

#### **SECTION 16: Other information**

#### Full text of H-phrases:

| Eye Irrit. 2A | Serious eye damage/eye irritation Category 2A               |
|---------------|---|
| Skin Irrit. 2 | Skin corrosion/irritation Category 2                        |
| STOT SE 3     | Specific target organ toxicity (single exposure) Category 3 |
| H315          | Causes skin irritation                                      |
| H319          | Causes serious eye irritation                               |
| H335          | May cause respiratory irritation                            |

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| NFPA health hazard   | : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given. |
|--|--|
| NFPA fire hazard   | : 0 - Materials that will not burn.  |
| NFPA reactivity  | : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.   |
| HMIS III Rating  |  |
| Health   | : 2 Moderate Hazard - Temporary or minor injury may occur  |
| Flammability   | : 0 Minimal Hazard - Materials that will not burn  |
| Physical       : 0 Minimal Hazard - Materials that are normally stable, even under fire condition react with water, polymerize, decompose, condense, or self-react. Non-Explored the stability of the stabil |  |

#### SDS US (GHS HazCom 2012)

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is offered solely for your consideration, investigation, and verification. It does not represent any guarantee of the properties of the product nor that the hazard precautions or procedures described are the only ones which exist. SynQuest shall not be held liable or any damage resulting from handling or from contact with the above product.