

# 1-(4-Benzyloxyphenyl)propane-1,2-dione Safety Data Sheet 2718103 according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 01/21/2016 Version: 1.0

| SECTION 1: Identification                                                                                                                                                                  |                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.1. Identification                                                                                                                                                                        |                                                                                                                                                  |
| Product form                                                                                                                                                                               | : Substance                                                                                                                                      |
| Substance name                                                                                                                                                                             | : 1-(4-Benzyloxyphenyl)propane-1,2-dione                                                                                                         |
| CAS No                                                                                                                                                                                     | : 477708-46-6                                                                                                                                    |
| Product code                                                                                                                                                                               | : 2718-1-03                                                                                                                                      |
| ormula                                                                                                                                                                                     | : C16H14O3                                                                                                                                       |
| Other means of identification                                                                                                                                                              | : MFCD06799946                                                                                                                                   |
| .2. Relevant identified uses of the s                                                                                                                                                      | substance or mixture and uses advised against                                                                                                    |
| Jse of the substance/mixture                                                                                                                                                               | : Laboratory chemicals<br>Manufacture of substances<br>Scientific research and development                                                       |
| .3. Details of the supplier of the saf                                                                                                                                                     | ety data sheet                                                                                                                                   |
| SynQuest Laboratories, Inc.<br>P.O. Box 309<br>Alachua, FL 32615 - United States of Americ<br>Γ (386) 462-0788 - F (386) 462-7097<br><u>nfo@synquestlabs.com</u> - <u>www.synquestlabs</u> |                                                                                                                                                  |
| .4. Emergency telephone number                                                                                                                                                             |                                                                                                                                                  |
| mergency number                                                                                                                                                                            | : (844) 523-4086 (3E Company - Account 10069)                                                                                                    |
| SECTION 2: Hazard(s) identificati                                                                                                                                                          | on                                                                                                                                               |
| .1. Classification of the substance                                                                                                                                                        |                                                                                                                                                  |
| lassification (GHS-US)                                                                                                                                                                     |                                                                                                                                                  |
| TOT SE 3 H335 - May cause respirator<br>full text of H-phrases: see section 16                                                                                                             | y irritation                                                                                                                                     |
| GHS-US labeling                                                                                                                                                                            |                                                                                                                                                  |
| Hazard pictograms (GHS-US)                                                                                                                                                                 | :<br>GHS07                                                                                                                                       |
| Signal word (GHS-US)                                                                                                                                                                       | : Warning                                                                                                                                        |
| Hazard statements (GHS-US)                                                                                                                                                                 | <ul> <li>H315 - Causes skin irritation</li> <li>H319 - Causes serious eye irritation</li> <li>H335 - May cause respiratory irritation</li> </ul> |
|                                                                                                                                                                                            |                                                                                                                                                  |

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| Ccording to Federal Register / Vol. 77, No. 58 / Mon     2.3. Other hazards | ay, March 20, 2012 / Kun            |                                                     |                        |                                                               |
|-----------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------|------------------------|---------------------------------------------------------------|
| No additional information available                                         |                                     |                                                     |                        |                                                               |
| .4. Unknown acute toxicity (GHS US                                          | )                                   |                                                     |                        |                                                               |
| lot applicable                                                              | ,                                   |                                                     |                        |                                                               |
| SECTION 3: Composition/informa                                              | tion on ingredien                   | ts                                                  |                        |                                                               |
| 3.1. Substance                                                              | 5                                   |                                                     |                        |                                                               |
| Substance type                                                              | : Mono-constitue                    | nt                                                  |                        |                                                               |
| Name                                                                        | Produc                              | t identifier                                        | %                      | Classification (GHS-US)                                       |
| 1-(4-Benzyloxyphenyl)propane-1,2-dione<br>(Main constituent)                | (CAS No)                            | 477708-46-6                                         | <= 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                                               |                                     |                                                     |                        |                                                               |
| .1. Description of first aid measures                                       |                                     |                                                     |                        |                                                               |
| irst-aid measures general                                                   | where possible                      | ). Move the affected per                            | sonnel away from the   |                                                               |
| irst-aid measures after inhalation                                          | respiration. Get                    | medical advice/attention                            | on.                    | ing. If not breathing, give artificial                        |
| First-aid measures after skin contact                                       | •                                   | ty of soap and water. G                             |                        |                                                               |
| irst-aid measures after eye contact                                         | present and ea                      | sy to do. Continue rinsi                            | ng. Get medical advic  |                                                               |
| irst-aid measures after ingestion                                           | mouth out with                      | water. Get medical adv                              |                        | in unconscious person. Rinse                                  |
| I.2. Most important symptoms and e                                          |                                     |                                                     |                        |                                                               |
| symptoms/injuries                                                           | : The most impo<br>2.2) and/or in s |                                                     | and effects are descri | bed in the labelling (see section                             |
| 4.3. Indication of any immediate med                                        | ical attention and spe              | ecial treatment needed                              | l                      |                                                               |
| Treat symptomatically.                                                      |                                     |                                                     |                        |                                                               |
| SECTION 5: Firefighting measure                                             | S                                   |                                                     |                        |                                                               |
| 5.1. Extinguishing media                                                    |                                     |                                                     |                        |                                                               |
| Suitable extinguishing media                                                |                                     | nt foam. Carbon dioxide surrounding fire.           | . Dry powder. Water s  | spray. Use extinguishing media                                |
| 5.2. Special hazards arising from the                                       | substance or mixture                | 9                                                   |                        |                                                               |
| ire hazard                                                                  | : Thermal decorr                    | position generates: Ca                              | rbon oxides.           |                                                               |
| .3. Advice for firefighters                                                 |                                     |                                                     |                        |                                                               |
| Firefighting instructions                                                   | : In case of fire:                  | Evacuate area.                                      |                        |                                                               |
| Protection during firefighting                                              |                                     |                                                     |                        | with self contained breathing                                 |
|                                                                             | apparatus. For                      | turther information refe                            | to section 8: "Exposi  | ure controls/personal protection".                            |
| ECTION 6: Accidental release m                                              | easures                             |                                                     |                        |                                                               |
| .1. Personal precautions, protective                                        | equipment and emer                  | gency procedures                                    |                        |                                                               |
| General measures                                                            | : Evacuate unne                     | cessary personnel. Ens                              | ure adequate air vent  | ilation. Do not breathe dust.                                 |
| 6.1.1. For non-emergency personnel                                          |                                     |                                                     |                        |                                                               |
| mergency procedures                                                         | : Only qualified p                  | ersonnel equipped with                              | suitable protective e  | quipment may intervene.                                       |
| .1.2. For emergency responders                                              |                                     |                                                     |                        |                                                               |
| Protective equipment                                                        |                                     | to take action without s<br>8: "Exposure controls/p |                        | ipment. For further information                               |
| .2. Environmental precautions                                               |                                     |                                                     |                        |                                                               |
| Avoid release to the environment. Notify auth                               | orities if product enters           | sewers or public water                              | S.                     |                                                               |
| 6.3. Methods and material for contain                                       | ment and cleaning u                 | p                                                   |                        |                                                               |
| For containment                                                             | : Stop leak if safe                 | e to do so.                                         |                        |                                                               |
| 12/08/2016                                                                  | EN (English US)                     |                                                     | SDS ID: 271810         | 03 2/6                                                        |
|                                                                             | ()                                  |                                                     |                        |                                                               |

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|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 sections                       |                                                                                                                                                                                                                                      |
| No additional information available                    |                                                                                                                                                                                                                                      |
| SECTION 7: Handling and storage                        |                                                                                                                                                                                                                                      |
| 7.1. Precautions for safe handling                     |                                                                                                                                                                                                                                      |
| 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 storage, includ               | ding 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

#### 8.1. Control parameters

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 and      | d chemical properties |
|---------------------------------------------|-----------------------|
| Physical state                              | : Solid               |
| Color                                       | : No data available   |
| Odor                                        | : No data available   |
| Odor threshold                              | : No data available   |
| рН                                          | : No data available   |
| Melting point                               | : No data available   |
| 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                              | : 254.29 g/mol        |
| Solubility                                  | : No data available   |
| Log Pow                                     | : No data available   |
|                                             |                       |

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|----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| 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 reac</b>                          | tivity                                                                                                   |
| 10.1. Reactivity                                               |                                                                                                          |
| No additional information available                            |                                                                                                          |
| 10.2. Chemical stability                                       |                                                                                                          |
| The product is stable at normal handling a                     | and storage conditions.                                                                                  |
| 10.3. Possibility of hazardous react                           | tions                                                                                                    |
| No additional information available                            |                                                                                                          |
| 10.4. Conditions to avoid                                      |                                                                                                          |
| Keep away from heat, sparks and flame.                         |                                                                                                          |
| 10.5. Incompatible materials                                   |                                                                                                          |
| Strong oxidizing agents.                                       |                                                                                                          |
| 10.6. Hazardous decomposition pro                              | oducts                                                                                                   |
| Under normal conditions of storage and us fire, see Section 5. | se, hazardous decomposition products should not be produced. Hazardous decomposition products in case of |
| <b>SECTION 11: Toxicological info</b>                          | rmation                                                                                                  |
| 11.1. Information on toxicological e                           | affects                                                                                                  |
|                                                                |                                                                                                          |
| Acute toxicity                                                 | : Not classified                                                                                         |
| Skin corrosion/irritation                                      | : Causes skin irritation.                                                                                |
| Serious eye damage/irritation                                  | : Causes serious eye irritation.                                                                         |
| Respiratory or skin sensitization                              | : Not classified                                                                                         |
| Germ cell mutagenicity                                         | : Not classified                                                                                         |
| <b>-</b> · · · ·                                               |                                                                                                          |

| Carcinogenicity                                    | : Not classified                    |
|----------------------------------------------------|-------------------------------------|
| Reproductive toxicity                              | : Not classified                    |
| Specific target organ toxicity (single exposure)   | : May cause respiratory irritation. |
| 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 |                               |  |

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| <b>SECTION 13: Disposal considera</b> | tions                                                                                         |
|---------------------------------------|-----------------------------------------------------------------------------------------------|
| 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:

| 1-(4-Benzyloxyphenyl)propane-1,2-dione CAS No 477708-46-6 100% | 1-(4-Benzyloxyphenyl)propane-1,2-dione | CAS No 477708-46-6 | 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                            |

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| 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,<br>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 conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives. |

#### 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.