

GHS-0055E

SAFETY DATA SHEET

 PRODUCT NAME **Dibenzyl Ether**

Date of issue 01/30/2012

Date of revision -

1 Identification of the substance or mixture and the supplier

Product name:	Dibenzyl Ether
Name of supplier:	Kyoto Electronics Manufacturing Co., Ltd.
Address:	68 Ninodan-cho, Shinden, Kisshoin, Minami-ku, Kyoto, Japan
Division:	Quality Assurance Department
Phone:	+81-75-691-4121
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MSDS No.	GHS-0055E

2 Hazard identification
GHS hazard class and category

Health hazards;	Acute toxicity oral:	Category 5
	Skin corrosion/irritation:	Category 3
	Eye damage/irritation	Category 2B
Environmental hazards;	hazardous to the aquatic environment	Category 1
	-Acute hazard:	
	hazardous to the aquatic environment	Category 1
	-Chronis hazard:	

Other hazard identification are not shown above because of the reasons below;
 Not applicable / Classification not possible

Label elements
Pictogram

Signal word

Warning

Hazard statements

May be harmful if swallowed
 Causes mild skin irritation
 Causes eyes irritation
 Very toxic to aquatic life
 Very toxic to aquatic life with long lasting effects

Precautionary statements
Prevention

Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
 Avoid release to the environment- if this is not the intended use.

Response	<p>IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.</p> <p>If skin irritation occurs, get medical advice/attention.</p> <p>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention. Wash hands after handling.</p> <p>Collect spillage.</p>
Disposal	Dispose of contents and container in accordance with regulation.
Other hazard statements	<p>Wear suitable protective clothing, gloves and eye/face protection.</p> <p>Avoid contact with skin and eyes.</p> <p>In case of accident or if you feel unwell, medical advice immediately (show label where possible).</p>

3 Composition/Information on ingredients

Substance/Mixture:	Substance
Chemical identity (or common name):	Dibenzyl Ether

Ingredient name	Composition (%)	Chemical formula	CAS No.
Dibenzyl Ether	Min. 98.0	(C6H5CH2)2O	103-50-4

Impurities and stabilizing additives which are themselves classified and which contribute to the classification of the substance;

None

4 First-aid measures

General description of necessary first aid measures:	<p>[Emergency Response Guidebook]</p> <p>Move victim to fresh air.</p> <p>Call emergency medical service.</p> <p>Apply artificial respiration if victim is not breathing.</p> <p>Administer oxygen if breathing is difficult.</p> <p>Remove and isolate contaminated clothing and shoes.</p> <p>In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.</p> <p>Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.</p>
Inhalation:	<p>In case of accident by inhalation: remove casualty to fresh air and keep at rest.</p> <p>If breathing is weak, irregular or has stopped, open his airway, loosen his collar and belt and administer artificial respiration.</p>
Skin contact:	<p>Take off immediately all contaminated clothing.</p> <p>After contact with skin, wash Immediately with of water.</p>
Eye contact:	<p>Gently rinse the affected eyes with clean water for at least 15 minutes.</p> <p>Arrange for transport to the nearest medical facility for examination and treatment by a physician as soon as possible.</p>
Ingestion:	<p>If swallowed, seek medical advice immediately and show this container or label.</p> <p>If swallowed rinse mouth with water (only if the person is conscious).</p> <p>Do not make an unconscious person vomit.</p>

Protections for first-aid persons: Protect yourself by wearing rubber gloves and air-tight safety goggles.

5 Fire-fighting measures

Extinguishing media: [Emergency Response Guidebook]
 Small Fires: Dry chemical, CO2, water spray.
 Large Fires: Water spray, fog or regular foam. Move containers from fire area if you can do it without risk. : Dike fire control water for later disposal; do not scatter the material. : Use water spray or fog; do not use straight streams.
 Do not get water inside containers. : Cool containers with flooding quantities of water until well after fire is out.

Incompatible extinguishing media: Nothing particular

Specific hazards arising from the chemical (and with regard to fire-fighting measures): Toxic gases will form upon combustion of : carbon monoxide

Specific fire-fighting measures: Move containers from fire area if it can be done without risk, if not possible, apply water from a safe distance to cool and protect surrounding area. Dry chemical powder or dry sand should be used for small fires.

Special protective equipment and precautions for fire-fighters: Fire-fighters should wear proper protective equipment.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures: Evacuate non-essential personnel.
 Wear appropriate protective clothing.

Environmental precautions: Attention should be given not to cause damage to the environment by flowing of spillage to rivers.

Measures and materials for containment and clean up: [Emergency Response Guidebook]
 Use clean non-sparking tools to collect material and place it into loosely plastic containers for later disposal.
 For small spill, absorb spill with absorbent and move to a chemical waste container. For large spill, prevent leakage by surrounded with earth and lead the spill to a safety place to collect.

Appropriate containment techniques/clean up procedures: Shut off the leakage source and stop leak if you can do it without risk.

Preventive measures for secondary accident: [Emergency Response Guidebook]
 Keep unauthorized personnel away.
 Stay upwind.
 Prevent entry into waterways, sewers, basements or confined areas.

7 Handling and storage

Precautions for safe handling:

Countermeasure technique(s):	(Exposure control for handling personnel) Wear proper equipment and take measures according to [8. Exposure control/personal protection].
Local exhaust ventilation system/general ventilation:	Ventilation according to [8. Exposure control/personal protection].
Preventive measures:	Use with an enclosed system or a local exhaust ventilation.
Incompatible contact(s):	See [10. Stability and reactivity]
Safety measures/incompatibility:	Do not shock, overturn, drop, or drag containers.

Conditions for safe storage, including any incompatibilities:

Countermeasure technique(s):	Take precautionary measures against static discharges. Take measures to prevent electrostatic charging. Keep away from sources of ignition and heat. Tightly closed in a well-ventilated place.
Incompatibilities:	See [10. Stability and reactivity]
Storage:	(Recommendation for storage) Keep tightly closed in dark cool place. (incompatible storage condition) See [10. Stability and reactivity].
Recommendation on container and packaging materials:	Glass, etc.

8 Exposure controls/Personal protection

Appropriate engineering controls:	Keep source tightly closed or install local exhaust ventilation. Provide shower and vanity unit nearby and make clear the location of these.
Control value:	Japan control value (2005) Not established.
Adopted value:	[JSOH] Not established. [ACGIH] Not established.

Individual protection measures, such as personal protective equipment (PPE):

Eye/face protection:	Wear protective eyeglasses or chemical safety goggles. Wear face protection.
Hand protection:	Wear impervious glove made from chloroprene, as appropriate.
Skin and body protection:	To prevent any contact, wear impervious clothing such as apron, boots, or whole-body suits made from chloroprene, as appropriate.
Respiratory protector:	[Emergency Response Guidebook] Wear positive pressure self-contained breathing apparatus (SCBA). Gas masks for organic compounds

9 Physical and chemical properties

Appearance, color:	Colorless to very pale yellow liquid
Odor:	Characteristic odor
pH:	Not available
Melting point/ freezing point:	Approx. 2C
Boiling point:	295–298C (decompose)
Flash point:	135C (C.C.)
Auto-ignition temperature:	Not available
Upper/lower flammability or explosive limits:	Lower limit; 0.6vol% Upper limit; 6.0vol%
Vapour pressure:	0.00137kPa (25C)
Vapour density (Air = 1):	6.8
Specific gravity (Density):	1.043 (20C)
Solubility:	Solubility in water; 0.004% (35C) Solubility in solvent; Very soluble in ethanol diethyl ether
Octanol/water partition coefficient (log Pow):	3.31
Decomposition temperature:	Not available
Viscosity:	Not available

10 Stability and reactivity

Chemical stability:	Decomposes by water.
Possibility of hazardous reactions:	Reacts with strong oxidants.
Conditions to avoid:	Sunlight, heat, moisture, contact with incompatible materials.
Incompatible materials:	Strong oxidants
Hazardous decomposition products:	Not available (except for carbon monoxide, carbon dioxide and water)

11 Toxicological information

(Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken.)

Acute toxicity:

[Emergency Response Guidebook]
Inhalation of material may be harmful.

Oral: rat LD50 2500 mg/kg

Irritant properties:

[Emergency Response Guidebook]
Contact with substance may cause severe burns to skin and eyes.
Irritating to skin.

Allergenic and sensitizing effects:

	Not available
Chronic toxicity:	
	Not available
Carcinogenic effects:	
	Not available
Mutagenic effects:	
	Not available
Toxicity for reproduction:	
	Not available

12 Ecological information

(Insufficient data are available on the effect of this substance on the environment, therefore utmost care must be taken.)

Ecotoxicity:

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Fish toxicity: Daphnia magna LC50/48H 0.77 mg/kg

Persistence and degradability:

Not available

Bioaccumulative potential:

Hardly biodegradability

0% by BOD (National institute of Technology and Evaluation, Japan)

Biotransportability:

Low residuality in fish or shells.

13 Disposal considerations

Contact a licensed professional waste disposal service to dispose of this material. Comply with all country, national and local regulations. Do not dump this product into sewers, on the ground or into any body of water.

14 Transport information

Basic classification information for the transporting/shipment:

Sea; Controlled under IMDG's regulations.

UN Number: 3082

UN Proper shipping name: Environmentally hazardous substance, liquid, n.o.s.

Class or Division: 9

Packing group: III

Marine pollutant: Not applicable

Air; Controlled under ICAO/IATA's regulations.

UN Number: 3082

UN Proper shipping name: Environmentally hazardous substance, liquid, n.o.s.

Class or Division: 9



Packing group: III

Special precautions which a user needs to be aware of or needs to comply with in connection with transport or conveyance either within or outside their premises:

Protection from direct sun light in transportation, and confirm the container does not leak.

Carefully load it onto a transporter without dropping, overturning or damaging so that it will stably stays on the transporter.

15 Regulatory information

Follow all laws and regulations in your country.

Disclaimer

For R&D use only. Not for drug, household or other uses.

Warranty

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 applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.