JRCure BDK

Version: V1.0.0.1

Creation Date: 2015/05/29 Revision Date: 2022/03/17 Record Number: ghs-0017

* According to UN GHS (the 6th revised edition)



1. Identification of the chemical and supplier

1. 1 Product identifier

Product name	JRCure BDK
Synonyms	2,2-dimethoxy-1,2-diphenylethan-1-one
CAS NO.	24650-42-8
EC NO.	246-386-6
Molecular formula	$C_{16}H_{16}O_3$

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses Additives, UV Photoinitiator.	
Uses advised against	Not for family or other use.

1.3 Details of the supplier of the Safety Data Sheet

THE E COMME OF CITE SUPPL	or or the surety E www shoot	
Name of the company	TIANJIN JIURI NEW MATERIALS CO.,LTD	
Address of the company	C-5/6, Vision Hill, No.1 Gonghua Road, Huayuan Hi-tech Park, Tianjin, China.	
Post code	300384	
Telephone number	+86-22-23811185	
Fax number	+86-22-87186899	
E-mail address	Carrie Wu (rui.wu@jiurichem.com)	

1 4 Emergency phone number

1.1 Emergency phone number	
Emergency phone Number	+86-22-58330700

2. Hazards identification

2.1 Hazard classification according to GHS

Acute toxicity-Oral	Category 4
STOT RE	Category 2
Hazardous to the aquatic	Category 3
environment, long-term hazard	

2.2 Label elements

Hazard pictograms

Signal word

Warning

JRCure BDK

Version: V1.0.0.1

Creation Date: 2015/05/29 Revision Date: 2022/03/17 Record Number: ghs-0017

* According to UN GHS (the 6th revised edition)



2.3 Hazard statements

H302	Harmful if swallowed.
Н373	May cause damage to organs (state all organic affected, if know) through prolonged or
	repeated exposure (Oral).
H412	Harmful to aquatic life with long lasting effects.

2.4 Precautionary statements

◆ Prevention

V 110 vention	
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.	
P273	Avoid release to the environment.
Response	
P301+P317	IF SWALLOWED:Get medical help.
P319	Get medical help if you feel unwell.
P330	Rinse mouth.
Storage	
Storage	Not applicable.
Disposal	
P501	Dispose of contents/container to in accordance with local/regional/national
	/international regulations (to be specified). Manufacturer/supplier or the competent

2.5 Hazard description

Physical and chemical hazards	Data conclusive but not sufficient for classification.
Health hazards	The material may cause damage to organs (state all organic affected, if know)
	through prolonged or repeated exposure (Oral).
Environment hazards	Harmful aquatic life with long lasting effects.

authority to specify whether disposal requirements apply to contents, container or both.

3. Composition/Information on Ingredients

Component	CAS NO.	EC NO.	Concentration percent %
2,2-dimethoxy-1,2-diphenylethan-1-one	24650-42-8	246-386-6	≥99

4. First Aid Measures

4.1 Description of First Aid Measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.	
Eye contact	In case of eye contact, immediately rinse with clean water for 20-30 minutes and	
	consult a physician.	

JRCure BDK

Version: V1.0.0.1

Creation Date: 2015/05/29 Revision Date: 2022/03/17 Record Number: ghs-0017

* According to UN GHS (the 6th revised edition)



Skin contact	Take off contaminated clothing and shoes immediately. Wash thoroughly with soap and water. Consult a physician if feel uncomfortable.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.
Inhalation	Move victim into fresh air. If breathing is difficult, give oxygen. Do not use mouth to mouth resuscitation if victim ingested or inhaled the substance. If not breathing, give artificial respiration and consult a physician immediately.
Protecting of first-aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

4.2 Most important symptoms and effects, both acute and delayed

1 See section 11.

4.3 Indication of any immediate medical attention and special treatment needed

1	Treat symptomatically.
2	Symptoms may be delayed.

5. Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media	Water spray, dry powder, carbon dioxide, or foam.
Unsuitable extinguishing media	Water jet.

5.2 Specific hazards arising from the substance or mixture

1	Combustible solid which burns but propagates flame with difficulty; it is estimated that most organic
	dusts are combustible (circa 70%) - according to the circumstances under which the combustion process
	occurs, such materials may cause fires and / or dust explosions.
2	Combustion of vapor and liquid may produce carbon monoxide, carbon dioxide and other hazardous gases.
3	Organic powders when finely divided over a range of concentrations regardless of particulate size or
	shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result
	in a fire or dust explosion (including secondary explosions).

5.3 Advice for firefighters

1	Alert Fire Brigade and tell them location and nature of hazard.
2	Wear self-contained breathing apparatus for firefighting if necessary.
3	Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used.
4	In case of fire in the surroundings, keep containers cool by spraying with water.
5	Eliminate all ignition sources if safe to do so.

JRCure BDK

Version: V1.0.0.1

Creation Date: 2015/05/29 Revision Date: 2022/03/17 Record Number: ghs-0017

* According to UN GHS (the 6th revised edition)



6 Uninvolved persons should evacuate to a safe place.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

1	Use personal protective equipment.
2	Remove all sources of ignition. Ensure adequate ventilation. Take precautionary measures against static
	discharges.
3	For personal protection see section 8.
4	Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Use personal protective
	equipment. Avoid breathing vapors and contacting with skin and eyes.

6.2 Environmental precautions

Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

1	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed
	containers for disposal.
2	Keep in suitable, closed containers for disposal.

7. Handling and storage

7.1 Precautions for handling

	• • • • • • • • • • • • • • • • • • • •	
1	Avoid contact with skin and eyes. Avoid formation of dust and aerosols.	
	Provide appropriate exhaust ventilation at places where dust is formed.	
2	Keep away from heat/sparks/open flames/ hot surfaces.	
3	For precautions see section 2.2.	

7.2 Precautions for storage

1	Keep containers tightly closed in a dry, cool and well-ventilated place.
2	Keep away from heat/sparks/open flames/ hot surfaces.
3	Store away from incompatible materials such as oxidizing agents and other incompatible materials.
4	Store away from foodstuff containers.

8. Exposure controls/personal protection

8.1 Control parameters

♦Occupational Exposure limit values

Commonant	Country/Region	Limit value - Eight hours		Limit value - Short term	
Component		ppm	mg/m³	ppm	mg/m³
2,2-dimethoxy-1,2-diphenylethan-1	Australia	-	-	-	-

JRCure BDK

Version: V1.0.0.1

Creation Date: 2015/05/29 Revision Date: 2022/03/17 Record Number: ghs-0017

* According to UN GHS (the 6th revised edition)



-one	Denmark	-	-	-	-
CAS NO.:24650-42-8	Germany (AGS)	-	-	-	-
	Ireland	-	-	-	-
	South Korea	-	-	-	-
	USA(OSHA)	-	-	-	-

◆Biological limit values

Biological limit values

No information available.

◆Monitoring methods

1 EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

8.2 Engineering controls

	8 8
1	Handle in accordance with good industrial hygiene and safety practice.
2	Ensure adequate ventilation, especially in confined areas.
3	Ensure that eyewash stations and safety showers are close to the workstation location.

8.3 Personal protection equipment

General requirement			
Eye protection	Tightly fitting safety goggles (approved by EN 166(EU) or NIOSH (US).		
Hand protection	Protective gloves (such as butyl rubber), approved by EN 374(EU).		
Respiratory protection	Use appropriative respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Recommended Filter type: low boiling organic solvent, Type AX, Brown, conforming to EN371.		
Skin and body protection	Wear fire/flame resistant/retardant clothing and antistatic boots.		

9. Physical and chemical properties

Physical and chemical properties

Appearance	White crystalline powder
Odor	Odourless
Odor threshold	No data available
pН	No data available
Melting point/freezing point	64.0-67.0 °C at 101.3 kPa

JRCure BDK

Version: V1.0.0.1

Creation Date: 2015/05/29 Revision Date: 2022/03/17 Record Number: ghs-0017

* According to UN GHS (the 6th revised edition)



Initial boiling point and boiling range	352.25°C(101.3 kPa)
Flash point	163 °C at 1013 hPa (open cup)
Evaporation rate	No data available
Flammability(solid, gas)	Non flammable
Upper/lower explosive limits	No data available
Vapor pressure	0.002 Pa at 25 °C
Vapor density	No data available.
Relative density	1.10 at 20 °C
Water Solubility	66.32mg /L at 25 °C
n-octanol/water partition coefficient	Log Kow(log Pow): 2.95 at 25℃
Auto-ignition temperature	> 400 °C at 1013 hPa
Decomposition temperature	No data available
Viscosity	No data available

10. Stability and reactivity

Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reaction	Stable under recommended storage conditions.
Conditions to avoid	Incompatible materials. Avoid light. Avoid electro-static discharge.
Incompatible materials	Substances to avoid: strong oxidizing agents.
Hazardous decomposition products	By fire toxic gases (COx) may be formed.

11. Toxicological information

LD ₅₀ (oral)	LD50-Oral - Rat - 1470 mg/kg bw
· /	
LD ₅₀ (dermal)	No data available.
LC ₅₀ (inhalation)	No data available.
LD ₅₀ (Intraperitoneal)	Not classified.
Skin corrosion/irritation	Not classified.
Serious eye damage/irritation	Not classified.
Respiratory or skin sensitization	Not classified.
Germ cell mutagenicity	Not classified.
Carcinogenicity	IARC: No component of this product present at levels greater than or equal
	to 0.1% is identified as probable, possible or confirmed human carcinogen
	by IARC.
Reproductive toxicity	Not classified.
STOT-single exposure	Not classified.
STOT-repeated exposure	May cause damage to organs (state all organs affected, if known) through

JRCure BDK

Version: V1.0.0.1

Creation Date: 2015/05/29 Revision Date: 2022/03/17 Record Number: ghs-0017

* According to UN GHS (the 6th revised edition)



	prolonged or repeated exposure (Route of exposure: Oral).
Aspiration hazard	Not classified.
Additional Information	Not classified.

12. Ecological information

Ecological information

Leological initol mation	
Acute (short-term) toxicity:	
Toxicity to Fish	LC50 (96h) 29.67mg/L
Toxicity to Invertebrates	EC50 (48h) 18.387mg/L
Toxicity to Algae	EC50 (96h) 19.666mg/L
Chronic (long-term) toxicity:	
NOEC(Fish):	3.215 mg/L
NOEC(Daphnia magna):	2.288 mg/L
NOEC(Algae/aquatic plants):	6.258 mg/L (96h)
Persistence and degradability	The test substance is inherently biodegradability.
Bioaccumulative potential	BCF: 10.63 L/kg ww.
Mobility in soil	Koc at 20 °C: 351.2
Results of PBT and vPvB assessment	Does not meet the criteria for PBT and vPvB according to Regulation
	(EC) No 1907/2006, annex XIII.
Other adverse effects	Harmful to aquatic life with long lasting effects.

13. Disposal considerations

Disposal considerations

r	
Waste chemicals	Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.
Contaminated packaging	Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.
Disposal recommendations	Refer to section 13.1and 13.2.

14. Transport information

14.1 Label

Label	Not applicable.
14.2 Transport information	
UN number	Not regulated
UN proper shipping name	Not regulated
Transport hazard class	Not regulated

JRCure BDK

Version: V1.0.0.1

Creation Date: 2015/05/29 Revision Date: 2022/03/17 Record Number: ghs-0017

* According to UN GHS (the 6th revised edition)



Packing group	Not regulated
Environmental hazards	No
Special precautions for user	See section 2.2
Transport in bulk according	
to Annex II of MARPOL 73/78	Not regulated
and the IBC Code	

15. Regulatory information

15.1 International chemical inventory

EINECS	Listed
TSCA	Listed
DSL	Listed
IECSC	Listed
NZLOC	Listed
PICCS	Listed
KECI	Listed
ENCS	Listed
AICS	Listed

16. Other information

16.1 Information on revision

Creation Date	2015/05/29
Revision Date	2022/03/17
Reason for revision	Modified according to the requirements of UN GHS(sixth revision) .

16.2 Reference

[1]IPCS: The International Chemical Safety Cards (ICSC) ,website: http://www.ilo.org/dyn/icsc/showcard.home

[2]IARC, website: http://www.iarc.fr/

[3]OECD: The Global Portal to Information on Chemical Substances, website: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en

[4]CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple

[5]NLM: ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

[6]EPA: Integrated Risk Information System, website: http://cfpub.epa.gov/iris/

[7]U.S. Department of Transportation: ERG, website: http://www.phmsa.dot.gov/hazmat/library/erg

[8] Germany GESTIS-database on hazard substance, website: http://gestis-en.itrust.de/.

16.3 Abbreviations and acronyms

CAS - Chemical Abstracts Service

TSCA- United States Toxic Substances Control Act Inventory

EINECS - European Inventory of Existing Commercial Chemical

DSL - Canadian Domestic Substances List

Substances

JRCure BDK

Version: V1.0.0.1

Creation Date: 2015/05/29 Revision Date: 2022/03/17 Record Number: ghs-0017

* According to UN GHS (the 6th revised edition)



PICCS - Philippines Inventory of Chemicals and Chemical

Substances

IECSC- China Inventory of Existing Chemical Substance

PC-STEL- Short term exposure limit

DNEL - Derived No Effect Level

RPE - Respiratory Protective Equipment

LC₅₀ - Lethal Concentration 50%

NOEC -No Observed Effect Concentration

PBT - Persistent, Bioaccumulative, Toxic

BCF - Bioconcentration factor (BCF)

CMR - Carcinogens, mutagens or substances toxic to reproduction

NZIOC -New Zealand Inventory of Chemicals

KECI- Existing and Evaluated Chemical Substances

PC-TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

PNEC -Predicted No Effect Concentration

LD₅₀- Lethal Dose 50%

EC₅₀ - Effective Concentration 50%

POW - Partition coefficient Octanol: Water

vPvB - very Persistent, very Bioaccumulative

16.4 Disclaimer

This Safety Data Sheet (SDS) was prepared according to UN GHS (the 6th revised edition). The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.