

MATERIAL SAFETY DATA SHEET

Date : 2020/3/10

MSDS No.Y-EM-3-23-01A

SECTION 1. -----PRODUCT IDENTIFICATION-----

Product name : Chip resistor (RC Series/YC Series /RE Series /TC Series/UE Series..)

Manufacturer's name :

YAGEO CORPORATION (Suzhou factory)

Address : No.10, Zhu Yuan Rd., Suzhou New District, Suzhou,Jiangsu Province.

TEL: +86.512.6825.5568

FAX: +86.512.6809.0039

SECTION 2. -----COMPOSITION/INFORMATION ON INGREDIENTS-----

Part name	Substance	substance in product wt%	CAS No
Ceramic Substrate	Al ₂ O ₃	75.0~93.0	1344-28-1
	SiO ₂	1.5~2.0	14808-60-7
	MgO	1.5~2.0	1309-48-4
Inner electrode(C1)	Ag	0.44~1.8	7440-22-4
	Pd	0.007~0.04	7440-05-3
Inner electrode(C2)	Ag	0.18~2.3	7440-22-4
Resistive layer	Ag	0.02~0.3	7440-22-4
	RuO ₂	0.1~1.7	12036-10-1
	Glass contain Pb	0.02~0.50	65997-18-4
Barrier layer	Ni	0.06~10	7440-02-0
Termination layer	Sn	0.06~5	7440-31-5
Glass layer	Glass	0.1~1.9	65997-17-3
Overcoat layer	Epoxy resin	0.2 ~3.2	25068-38-6
Marking	Epoxy resin	0~0.03	25068-38-6

SECTION 3. -----HAZARDS IDENTIFICATION-----

Hazardous product for human health if swallowed

SECTION 4. -----FIRST-AID MEASURES-----

Main effect : Risk of stomachache

Eye contact : No irritation in human.

Skin contact : No irritation in human.

Yageo Electronics (China) Co., Ltd. No.10, Zhu Yuan Rd., Suzhou New District, Suzhou,Jiangsu Province 215011, P.R.C.

國巨電子 (中國) 有限公司江蘇省蘇州市新區竹園路 10 號

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Ingestion : If swallowed,urge to vomit,and take to hospital at once.

SECTION 5. -----FIRE FIGHTING MEASURES-----

Common extinguishing means : In case of fire in close proximity,all means of extinguishing are acceptable,e.g. foam,dry chemical, carbon dioxide,water.

Inappropriate extinguishing means : No restriction

Specific hazards : Non-combustible

Extinguishing instruction : Keep person removing from an upwind of fire.

SECTION 6. -----ACCIDENTAL RELEASE MEASURES-----

Sweep up, place in a bag and collect for waste disposal.

Prevent discharge into the environment(sewers,river,soil,- - -)

SECTION 7. -----HANDLING AND STORAGE-----

Handling : Keep storage place temperature from 15 to 35 degree C, humidity from 45 to 85% RH.

Storage : Keep in original packing , the above environment, and away from corrosive materials.

SECTION 8. -----EXPOSURE CONTROLS/PERSONAL PROTECTION-----

Engineering control : Premises ventilation

Authorized limit values : not applicable

Respiratory protection : not applicable

Hand protection : not applicable

Eye protection : not applicable

Skin protection : not applicable

Other precaution : not applicable

SECTION 9. -----PHYSICAL AND CHEMICAL PROPERTIES-----

Physical state : solid

Appearance : square/Black-Gray colors

Order : none

PH value : not applicable

Decomposition temperature : not applicable

Flash point : not applicable

Boiling point : not applicable

Melting point : >1600°C

Flammable limits(LEL) : not applicable

Flammable limits(UEL) : not applicable

SECTION 10. -----STABILITY AND REACTIVITY-----

Stability : stable on normal temperature and pressure

Condition to avoid : high temperature and humidity

Hazardous reaction with : not applicable

Hazardous decomposition products : not applicable

SECTION 11. -----TOXICOLOGICAL INFORMATION-----

Acute effects : not applicable

Toxicity : not traceable

SECTION 12. -----ECOLOGICAL INFORMATION-----

Biological oxygen demand : not applicable

Chemical oxygen demand : not applicable

Biological /Chemical oxygen demand ratio : not applicable

Biochemical factor : not applicable

Ecotoxicity : not applicable

SECTION 13. -----DISPOSAL CONSIDERATIONS-----

Installed or dump in a incinerator equipped in accordance with all federal, state ,
local and national environmental regulations.

SECTION 14. -----TRANSPORT INFORMATION-----

No classification assigned.

Not subject to Transport-regulation Dangerous Substances under IATA Dangerous
Goods Regulations.

SECTION 15. -----REGULATORY INFORMATION-----

Designation according to EUWEEE/ROHS and Local regulations.

No classification assigned.

SECTION 16. -----OTHER INFORMATION-----

These data are based on our present knowledge. However, they shall not constitute a
uarantee for any specific product feature and shall not establish a legally valid

contractual relationship.

Date of latest MSDS version : March.10.2020

Person responsible for MSDS :

Administrator: Eris Chen

Department:PED.Dep

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