

# Material Safety Data sheet

Document No. UE-RP-0879 R:0

Issuing date 28th Sep. 2005

Issued by S.Okumura

Approved by K.Nishina

## SECTION I – GENERAL INFORMATION

MANUFACTURER'S NAME		
OHKUCHI ELECTRONICS CO.,LTD SUMITOMO METAL MINING PACKAGE MATERIALS CO.,LTD.		
ADDRESS	TEL	FAX
1755-2 Ushio Ohkuchi City Kagoshima, 895-2501 Japan	81-995-22-7511	81-995-22-6730
PRODUCT NAME		
QFN Lead frame		

## SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT	ELEMENT	COMPOSITION (wt%)	COMPOSITION DATA APPLICABLE AREA	OSHA PEL* (mg/m3)
Copper	(Cu)	Balance	Leadframe base material	-
Iron	(Fe)	2.3	Leadframe base material	-
Phosphorus	(P)	0.03	Leadframe base material	-
Zinc	(Zn)	0.15	Leadframe base material	-
Silver	(Ag)	>99.99	Ag plating layer	-

Above PEL & TLV data are applicable to the individual ingredient only.

\*OSHA PEL ; Permissible Exposure Limit regulated by Occupational Safety and Health Administration.

\*\*ACGIH TLV ; Threshed Limit Value suggested by American Conference of Governmental Industrial Hygienists,Inc.

## SECTION III - PHYSICAL DATA

Appearance	Solid
Odor	Odorless
Melting point	1,089°C (194A)
Solubility in H <sub>2</sub> O	insoluble
Vapor density (Air=1)	N/A
Vapor pressure	N/A
Specific gravity(H <sub>2</sub> O=1)	8.9 (194A)

## SECTION IV - FIRE AND EXPLOSION DATA

Flash point	None
Fire point	None

## SECTION V – HEALTH HAZARD INFORMATION

<p>This product is physically and chemically stable and not harmful. It is necessary to handle with care because it is a thin plate in shape and sharp.</p> <p>This product itself does not generate any dust or fume, however further processing like grinding, melting, cutting or processing in any other ways may potentially generate hazardous dust or fume which can be inhaled or can contact with the skin or eyes.</p>
--