



**KHOSLA ENGG.
PVT. LTD., PUNE.**

PRODUCT SPECIFICATION

**TITLE: KHOSLA DELUXE
QUALITY LEADED NO-CLEAN
SOLDER WIRE**

Ref.No. : PDS/936
ISSUE NO. : 01
REV. NO. : 0
DATE : 19.07.2016
PAGE : 01 of 02

1. SCOPE: This Specification covers specially designed high quality no clean core solder wire used for wave soldering high quality electronic PCB, such as through holes, mixed technology and surface mount assemblies..

2. GENERAL: 'Khosla' Super Deluxe Quality no-clean core solder wire are manufactured from high quality virgin raw materials and further processed in such a way that end product ensure low dross, low oxide, great fluidity and high productivity in terms of soldering area. Our no clean wire also ensure good quality of surface after soldering.

3. CHEMICAL COMPOSITION :

2. The chemical composition of solder alloy will be as below: As per IS 1921:2005, IS 193, BS EN 29453 & J-STD 006A.

Sr. No.	Alloy/Composition	% of Tin	% of Lead	Melting Range (°c)
1	10/90 (Sn/Pb)	10 ± 0.5%	Remainder	268-290
2	15/85(Sn/pb)	15± 0.5%	Remainder	227-288
3	20/80 (Sn/pb)	20± 0.5%	Remainder	183-275
4	25/75(Sn/Pb)	25± 0.5%	Remainder	183-268
4	30/70(Sn/pb)	30± 0.5%	Remainder	183-255
5	40/60(Sn/pb)	40± 0.5%	Remainder	183-234
6	50/50(Sn/pb)	50± 0.5%	Remainder	183-212
7	60/40 (Sn/pb)	60± 0.5%	Remainder	183-188
8	63/37 (Sn/pb)	63± 0.5%	Remainder	183
9	70/30 (Sn/Pb)	70± 0.5%	Remainder	183 - 192
10	80/20 (Sn/Pb)	80 ± 0.5%	Remainder	183-199

4. IMPURITIES :

The maximum impurity levels will be as below : As per IS 1921:2005, SI 193 BS EN 29453 & J-std 006A.

Element	% of Element
Bismuth	0.10%
Copper	0.08%
Arsenic	0.03%
Iron	0.02%
Aluminum	0.001%
Zinc	0.003%
Cadmium	0.002%
Silver	0.10 %
Bismuth	0.10%



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5 FLUX:

KHOSLA' has developed a unique flux. It provides the fluxing levels that promote fast wetting action and maximum wetting spread. Utilizing synthetically refined rosin and very effective activator, no-clean flux wets and spreads like an RO type. No-clean flux exhibits virtually no spattering. No-clean flux conforms to J-STD-004, ROL0 and having below features.

Parameter	Specification	Test method
Flux classification	ROL0	JSTD-004
Copper mirror	No Removal of copper film	IPC-TM-650 2.3.32
Silver Chromate	Pass	IPC-TM-650 2.3.33
Corrosion SIR	Pass	IPC-TM-650 2.6.15

6 FLUX PERCENTAGE:

The mass of rosin flux in the core of solder wire, commonly termed as flux percentage shall be 1 to 3 percent of total mass flux core solder wire. If flux percent specified by customer it will be maintained within $\pm 0.2\%$ tolerance.

7. **CORE:** The core of Solder wire shall of single, three or five core.



Single core



Three core



Five core

8. FLUX RESIDUE :

- The flux residue shall be transparent in color.
- The flux residue, when examined after an interval not more than 30 minutes of application. shall be non-tacky / sticky.

9 ACCEPTANCE CRITERIA :

- Flux % : Customer require/Specified $\pm 0.2\%$
- Surface Finish (Shine) : No burr, marking or cracks as per approved sample.

10 APPLICATION :

'Khosla' Super Deluxe Quality No-clean core solder wire, is used in electronic appliances, PCBs, hand soldering.

11 HANDLING AND STORAGE :

- This rosin core solder wire is wound on spools of 50 gm, 500 gm, and 3 kg or as per customer requirement and further labeled prior to be storage.
- This Solder wire to be stored in finish good stored.

12 SHELF-LIFE: This Solder Wire has infinite shelf life.

Prepared By :
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Approved By :
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